DOCUMENT RESUME

ED 166 100 SO 011 481

TITLE	Bellagio IV Population Conference. Working Papers.
INSTITUTION	Rockefeller Foundation, New York, N.Y.
PUB DATE	Nov 77
NOTE	180p.; For a related document, see SO 011 480
AVAILABLE FROM	Publication Office, The Rockefeller Foundation, 1133 Avenue of the Americas, New York, New York 10036 (free)
EDRS PRICE	MF-$0.83 HC-$10.03 Plus Postage.
DESCRIPTORS	Birth Rate; Contraception; Cross Cultural Studies; Data Analysis; Demography; Developed Nations; Developing Nations; Economic Development; Family Planning; *Futures (of Society); *Global Approach; Government Role; Health Needs; *Needs Assessment; Policy Formation; Population Education; *Population Growth; *Problem Solving; Reproduction (Biology); Research Needs; Social Problems; Social Science Research; Sociocultural Patterns; World Problems

ABSTRACT

The document contains papers presented at a meeting to consider global population growth. The purpose of the conference was to promote the exchange of ideas relating to population growth between educators, government officials, and development agency personnel from developing and developed nations. Ten papers are presented. Topics discussed include ways to implement global population policies, social science research on population and development, progress toward new contraceptives, reproduction research, the role of international assistance agencies in family planning, trends in international population assistance, and international population policy. A summary of conference proceedings highlights findings. These include that the field of population studies is changing rapidly, there is more awareness of population problems in the developing world, experts are increasingly convinced that population problems are closely related to development, developing nations are beginning to increase funds for population research, and both developing and developed nations are experiencing a sense of urgency in coping with population problems. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED166100

WORKING PAPERS

The Rockefeller Foundation

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Henry Romney

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Bellagio IV Population Conference

S0-011481

2

PUBLICATION DATE NOVEMBER 1977

BELLAGIO IV POPULATION CONFERENCE

A Conference Sponsored by The Rockefeller Foundation

June 7-9, 1977

Ulvshale, Denmark

The Rockefeller Foundation

November 1977

Library of Congress Cataloging in Publication Data

Bellagio Conference on Population, 4th, Ulvshale,
Denmark, 1977.
Bellagio IV Population Conference, June 7-9, 1977.

(Working papers - The Rockefeller Foundation)
Includes bibliographical references.
1. Population--Congresses. 2. Population policy--Congresses. 3. Birth control--Congresses. I. Series: Rockefeller Foundation. Working papers - The Rockefeller Foundation.
HB849.B45 1977 301.32 77-20665

Published in November 1977 by The Rockefeller Foundation

Printed in the United States of America

CONTENTS

v	Preface	Allan C. Barnes
vii	Participants	
1	Two and a Half Years After Bucharest: Searching for Means and Ways to Implement the World Population Plan of Action (WPPA)	Carmen Miró
35	The International Review Group of Social Science Research on Population and Development (IRG)	Carmen Miró
42	Progress Toward New Contraceptives: The Program of the International Committee for Contraception Research	Sheldon J. Segal
57	Reproduction Research and Birth Control Technology: An International Collaboration Effort to Meet the Needs of Developing Countries - The WHO Programme	A. Kessler and C. C. Standley
63	Reproductive Science and Contraceptive Development: Recommendations to International Assistance Agencies	Oscar Harkavy
78	Recent Trends in International Population Assistance	Halvor Gille
98	Where Are We Going?: An Outline	Bernard Berelson
114	Population Policy and the International Donor Community: A Perspective on the Next Decade	Paul Demeny
128	Notes on Strategic Issues in Population	George Zeidenstein
161	Summary Comments	David E. Bell

CONTENTS

v	Preface	Allan C. Barnes
vii	Participants	
1	Two and a Half Years After Bucharest: Searching for Means and Ways to Implement the World Population Plan of Action (WPPA)	Carmen Miró
35	The International Review Group of Social Science Research on Population and Development (IRG)	Carmen Miró
42	Progress Toward New Contraceptives: The Program of the International Committee for Contraception Research	Sheldon J. Segal
57	Reproduction Research and Birth Control Technology: An International Collaboration Effort to Meet the Needs of Developing Countries - The WHO Programme	A. Kessler and C. C. Standley
63	Reproductive Science and Contraceptive Development: Recommendations to International Assistance Agencies	Oscar Harkavy
78	Recent Trends in International Population Assistance	Halvor Gille
98	Where Are We Going?: An Outline	Bernard Berelson
114	Population Policy and the International Donor Community: A Perspective on the Next Decade	Paul Demeny
128	Notes on Strategic Issues in Population	George Zeidenstein
161	Summary Comments	David E. Bell

PREFACE

In June of 1977 The Rockefeller Foundation convened a meeting to consider the problem of the world's population growth. For the sake of continuity, this was referred to as "Bellagio IV" despite the fact that the meeting had outgrown the facilities of the Foundation's Study and Conference Center in Bellagio, Italy, and the group was actually convened at Ulvshale, Denmark.

The planning for this conference began when the Foundation convened a Population Seminar of the donor community in New York City on July 17-18, 1975. From this emerged a consensus (far from unanimous) that such a conference should be held and an Executive Committee was appointed, representing most of the donors in the population field, to decide the theme and outline the format for the meeting. The Executive Committee met in February of 1976 at the Foundation headquarters, picked an appropriate time for the conference (subsequently only changed twice), and designated a Steering Committee composed of four representatives of the donor agencies and four representatives of the developing countries to work out the details of the program and to commission the necessary background papers. The Steering Committee met at the Foundation on three occasions (April 14, 1976; October 26-27, 1976; and March 8, 1977), reviewed the papers which had been prepared, and set the final agenda. The Foundation wishes to express its great appreciation to all those who gave so generously of their time both in the planning meetings and in the preparation of papers.

Following the publication of the "Greep Report" (Reproduction and Human Welfare: A Challenge to Research, Roy O. Greep, Marjorie A. Koblinsky and Frederick S. Jaffe. Cambridge, Mass.: MIT Press, 1976), sponsored by the Ford and Rockefeller Foundations and the International Development Research Centre, a meeting was convened in London (Conference on Public Sector Involvement in Reproductive Science and Contraceptive Research) composed largely of European donors from which an additional position paper emerged for presentation at the Bellagio IV Population Conference.

This Bellagio meeting differed from the three population conferences that preceded it in several respects. As the list of those who were in attendance would indicate, there were almost twice as many conferees present, both those who represented the donor community and those who represented the less developed countries. In addition, the World Population Year had produced the Bucharest conference and the World Population Plan of Action to help focus the discussion. Fortuitously, the conference also had the advantage of the availability of Robert McNamara's speech at the Massachusetts Institute of Technology (April 28, 1977) on the population problem.

As the Conference discussions developed, it became evident that this is not a topic on which the donors can be separated from the recipients or developed from the developing countries. There is but one future for the globe and the years since Bucharest have only underscored our growing interdependence. Improved mutual awareness of the complexities of the problem we face is a sine qua non of effective progress.

While the position papers were prepared chiefly to serve as a basis for active discussion, nevertheless they have considerable interest and value in their own right. One must also applaud David Bell's succinct summary which reflects most of the consensus arrived at by the Conference.

It is also a pleasure to express the Foundation's appreciation to the Danish government for contributing the use of the lovely conference center, the Europahøjskolen, at Ulvshale. A good deal of the success of the Conference came from the charming surroundings and the hospitality of our Danish hosts.

While improved mutual awareness of the problems facing the globe is not a solution in and of itself, it is a prerequisite to reaching such a solution. It is hoped that this volume will contribute to such an awareness.

November 1977 Allan C. Barnes, M.D.

PARTICIPANTS

Allan C. Barnes, M.D.
Vice President
The Rockefeller Foundation
1133 Avenue of the Americas
New York, New York 10036

Mr. David E. Bell
Executive Vice President
Ford Foundation
320 East 43rd Street
New York, New York 10017

Mr. E. C. Burr
Ministry of Overseas Development
Eland House
Stag Place
London SW1E 5DH, England

Mr. Chr. Christiansen
Danish International Development Agency
Ministry of Foreign Affairs
Amaliegade 7
DK-1256 Copenhagen K, Denmark

Elizabeth B. Connell, M.D.
Associate Director
Health Sciences
The Rockefeller Foundation
1133 Avenue of the Americas
New York, New York 10036

Mr. R. Primitivo de Guzman
Executive Director
Commission on Population
Population Center Building
South Super Highway
Makati, Rizal, Philippines

Mr. Paul Demeny
Vice President
Director, Center for Policy Studies
The Population Council
One Dag Hammarskjold Plaza
New York, New York 10017

Dr. Wulf-Dieter Ernert
Unit for Health, Population and Nutritional Policies
Ministry of Economic Cooperation
5300 Bonn 12, Germany

Dr. H. Galjaard
Professor of Cell Biology
University of Rotterdam
Wytemaweg 2A
Rotterdam, Netherlands

Mr. Halvor Gille
Deputy Executive Director
Policy and Programme Development
U.N. Fund for Population Activities
485 Lexington Avenue
New York, New York 10017

Ambassador Marshall Green
Coordinator of Population Affairs
Department of State
OES/CP, Room 7815
Washington, D.C. 20520

Mr. James D. Greig
Director, Population Bureau
Ministry of Overseas Development
Eland House
London SW1E 5DH, England

Mrs. Tanja Gronning
Danish International Development Agency
Ministry of Foreign Affairs
Amaliegade 7
DK-1256 Copenhagen K, Denmark

Mr. Oscar Harkavy
Program Officer in Charge
Population, International Division
Ford Foundation
320 East 43rd Street
New York, New York 10017

Ms. Julia Henderson
Secretary General
International Planned Parenthood
Federation
18-20 Lower Regent Street
London SW1Y 4PW, England

Dr. W. David Hopper
President
International Development Research
Centre
Box 8500
Ottawa, Canada K1G 3H9

Alexander Kessler, M.D.
Chief, Human Reproduction Unit
World Health Organization
1211 Geneva 27, Switzerland

Mr. Jack Kisa
Chief, Jobs and Skills Programme for
Africa
International Labour Organisation
P. O. Box 2532
Addis Ababa, Ethiopia

Mr. Sander M. Levin
Assistant Administrator for Population
and Humanitarian Assistance
Agency for International Development
Department of State
Washington, D.C. 20523

Mr. Joseph Magari
Senior Planning Officer
Ministry of Finance and Planning
The Treasury
P. O. Box 30007
Nairobi, Kenya

H. Mahler, M.D.
Director-General
World Health Organization
1211 Geneva 27, Switzerland

Dr. Fatima Abdel Mahmoud
Minister
Ministry of Social Affairs
P. O. Box 2663
Khartoum, Sudan

Mr. Robert S. McNamara
President
World Bank
1818 H Street, N.W.
Washington, D.C. 20433

Mr. Ernst Michanek
Director General
Swedish International Development
Authority
Birger Jarlsgatan 61
S 105 25 Stockholm, Sweden

Dr. Carmen A. Miró
Chairman, International Review Group of
Social Science Research on Population
and Development
El Colegio de México
Camino al Ajusco No. 20
Mexico 20, D.F., Mexico

Mr. Joseph E. Potter
Staff Associate, International Review
Group of Social Science Research on
Population and Development
El Colegio de México
Camino al Ajusco No. 20
Mexico 20, D.F., Mexico

Mr. Noble Power
Vice President for Bilateral Programs
Canadian International Development Agency
122 Bank Street
Ottawa, Canada K1A 0G4

Reimbert T. Ravenholt, M.D.
Director, Office of Population
Agency for International Development
Department of State
2201 C Street, N.W.
Washington, D.C. 20523

Mr. Kaj Repsdorf
Director-General
Danish International Development Agency
Ministry of Foreign Affairs
Amaliegade 7
DK-1256 Copenhagen K, Denmark

10

Dr. Fred T. Sai
Assistant Secretary General
International Planned Parenthood
Federation
18-20 Lower Regent Street
London SW1 4PW, England

Mr. Rafael M. Salas
Executive Director
U.N. Fund for Population Activities
485 Lexington Avenue
New York, New York 10017

Dr. Sheldon J. Segal
Senior Vice President and Director
Center for Biomedical Research
The Population Council
York Avenue and 66th Street
New York, New York 10021

Suwardjono Surjaningrat, M.D.
Chairman
National Family Planning Coordinating
Board
P. O. Box 186
Jakarta, Indonesia

Mr. Léon Tabah
Director
Population Division
United Nations
New York, New York 10017

Mr. Carl Wahren
Head of Division
Population, Health and Nutrition
Swedish International Development Agency
Birger Jarlsgatan 61
S 105 25 Stockholm, Sweden

Kenneth S. Warren, M.D.
Director
Health Sciences
The Rockefeller Foundation
1133 Avenue of the Americas
New York, New York 10036

Mr. Badruddin Zahidi
Secretary
Population Planning Division
Pakistan Secretariat
Block S
Islamabad, Pakistan

Mr. George Zeidenstein
President
The Population Council
One Dag Hammarskjold Plaza
New York, New York 10017

TWO AND A HALF YEARS AFTER BUCHAREST: SEARCHING FOR MEANS AND WAYS TO IMPLEMENT THE WORLD POPULATION PLAN OF ACTION (WPPA)

Carmen A. Miró*

Introduction

Dissatisfaction with the 1974 World Population Conference (WPC) and with its main final product, the World Population Plan of Action (WPPA), has been voiced repeatedly in several quarters and by different types of students of population phenomena. In a somewhat different vein, others have tried to interpret the "message from Bucharest."[1] This paper attempts to show that the WPPA has the potential to stimulate and guide future national and international action in the field of population. The following review of events and developments that have taken place since the WPC indicates, however, that this potential is far from being fully realized.

It should not have come as a surprise to either the developed nations or to the United Nations Secretariat - as it apparently did - that most of the Third World would have assumed such a militant stance at Bucharest, with the evident support of the Socialist countries. In the first place, it had insistently been said, prior to the WPC, that its great merit stemmed from the fact that for the first time in history the topic of "population" was going to be considered at the political level by high ranking government officials. This represented a significant departure from the two previous world population conferences (Rome, 1954 and Belgrade, 1965), organized by the United Nations with the collaboration of the International Union for the Scientific Study of Population. Nobody should have expected that government representatives would behave in a strictly aseptic scientific manner, disregarding the political positions adopted by their governments with their potential attendant advantages and

---

*The author is indebted to Joseph E. Potter for numerous editorial suggestions.

12

disadvantages and their commitments in terms of allegiances and cleavages. It should be added that "population" had already been for more than two decades a very controversial topic, laden with considerable ideological content. "Objectivity" in this field, as in others involving different interpretations of the causal relation among social phenomena, has been perceived as being represented by how each group of the participating actors judge the problem.

No less important for the direction taken by the deliberations in Bucharest is the fact that the commitment of the developing nations to achieve more equitable international economic relations had advanced during the previous decade in a crescendo from the First UN Conference on Trade and Development (1964), to the 1974 Sixth Special Session of the UN General Assembly, during which, precisely three and a half months before the WPC, two very significant resolutions were approved: the 3201 (S-VI), "Declaration on the Establishment of a New International Economic Order," and 3202 (S-VI) on an action programme for its establishment. It does not seem a coincidence that during that decade two conferences in which developing nations coordinated their positions had been held in Algiers and that it was one of the representatives of this country who led the challenge to the Draft WPPA, as submitted by the UN Secretariat. By shifting the explicit aim of WPPA stated in the first paragraph of the draft from "to affect population variables," to the broader objective, "to help coordinate population trends and the trends of economic and social development," as finally adopted, the Third World was only being consistent with the recommendation included in Chapter IX, paragraph 2 of the already mentioned Resolution 3202 (S-VI). This paragraph made explicit reference, among other things, to the planned WPC, 1974, recommending that its activities should be so developed as to contribute to the Programme of Action for the Establishment of a New International Economic Order.

Two years earlier the UN Economic and Social Council had already underscored the importance that it attributed to population policy within a developmental context. In both the introduction and an operative paragraph of Resolution 1672 (LII) adopted in June 1972, endorsing the programme and arrangements for the WPC, the ECOSOC clearly established what would later turn out to be the leit-motiv of the conference:

> Convinced that economic and social development is an essential element and a prerequisite to an effective population policy, and being aware that further action and expansion of activities is needed to this end at both the national and international levels....Requests the Population Commission and the World Population Conference, 1974, to give the highest priority[2] to the consideration of social, economic and other conditions conducive to the attainment of national demographic objectives.

Even the 1972 Conference on the Human Environment, which was followed by the UN Secretariat as model for the WPC, had adopted "Principle 10," that referred to "stability in prices, adequate income from basic products and raw materials" as "essential elements" in developing countries, for the enhancement of the environment.

Furthermore, the International Youth Population Conference held in Bucharest a few days before the WPC could have served as a premonition of the character that the deliberations concerning the WPPA could take. When the WPC convened, the World Youth had already taken the stance that any attempts at reducing rates of population growth would "only be effective if they are part of a comprehensive and integrated strategy for rapid social and economic development."[2]

In short, Bucharest only came to reinforce what had been voiced before by social scientists from the developing world and by several organs of the UN system, namely that it is impossible to separate the population issue from its economic and political context.

Considering all these antecedents, it is a pity that the WPC Secretariat did not pay enough attention to the sensitive political situation that the Sixth Special UN General Assembly had stirred up among its members, a situation that was further complicated in Bucharest by the controversial nature of the "population problem."

A clearer insight into the potential political complications of the WPC probably would not have helped to avoid the discussion of some of the most controversial issues raised during the conference. But, it surely would have resulted in a smoother running of the conference, and in a more productive use of the time of the important government representatives gathered there. The basic papers of the conference and the corresponding background documentation may constitute the most complete and indeed technically sound set of documents on population subjects ever to be prepared internationally. It is to be deplored that conference participants did not have time to study their content, and discuss some of the substantive issues that they raised. In fact, it would probably have been useful for those government representatives responsible for examining the draft WPPA in a Working Group to have benefited from a prior discussion of the topics that were dealt with by the Plennary, and the First, Second and Third Committees.[3]

The WPPA: A Potentially Strong Political Instrument

But what many people have considered to be perhaps the greatest shortcoming of the WPC, the highly politicized atmosphere in which the debates took place, can be turned into one of its assets. The World Population Plan of Action, while a consensus document, was arrived at after considerable discussion between ardent opponents, and it emerged from the confrontation establishing certain fundamental premises on which the commitment for future action in the population field at the political level, rests. A perusal of the Plan reveals, among others, the following:[4]

> The promotion of development and improvement of quality of life require coordination of action in all major socio-economic fields including that of population (1);
>
> The Plan of Action must be considered as an important component of the system of international strategies (1);
>
> Where trends of population growth, distribution and structure are out of balance with social, economic and environmental factors, they can, at certain stages of development, create additional difficulties for the achievement of sustained development (2);
>
> Individual reproductive behaviour and the needs and aspirations of society should be reconciled (7).

In addition, certain principles of the Plan clearly attest to a consensus on the importance of demographic variables. For example:

> The principal aim of social, economic and cultural development, of which population goals and policies are integral parts, is to improve levels of living and the quality of life of the people (14a);
>
> Population and development are interrelated: population variables influence development variables and are also influenced by them (14c);
>
> The primary aim of this Plan of Action is to expand and deepen the capacities of countries to deal effectively with their national and subnational population problems (15).

In regard to the general objectives of the Plan the following excerpts stand out as recognition, on the part of national representatives attending the WPC, of the political nature of the task to be undertaken under the guidance of the WPPA:

> To recommend guidelines for population policies consistent with national values and goals and with internationally recognized principles (15f);
>
> To promote the development and implementation of population policies where necessary, including improvement in the communication of the purposes and goals of these policies to the public and the promotion of popular participation in their formulation and implementation.

The Bucharest consensus can indeed turn out to be rather strong as a political instrument, if one considers that it went as far as recommending that all countries "respect and ensure, regardless of their overall demographic goals, the right of persons to determine, in a free, informed and responsible manner, the number and spacing of their children." (29a)

A Review of Events and Developments Since Bucharest

Even if one would be tempted to discard the WPPA as an instrument with little political leverage, it is impossible to escape the conclusion that the interest in and discussion of this document has not died down in the two and a half years that have elapsed since its adoption. Rather the WPPA continues to capture the attention of different sectors, both at the international and national levels. While previous World Population Conferences were responsible for basic contributions to the fund of scientific knowledge on population, in comparison with Bucharest their repercussions on what might be called the political action front were practically non-existent. While the interest the 1954 Conference generated within the UN towards the creation of the regional demographic training and research centers had considerable impact in the field through the years, the direct influence of the Conference at the political level was meagre. The 1965 event came closer to the concerns that prevailed at Bucharest; several meetings dealt with relationships of demographic and socio-economic factors. Its second main contribution was that of helping to increase awareness of these interrelations and inducing important changes in the content of the UN Population Division work programme. Aside from that, its effects on the national political sphere, if any, died down very soon.

The following review of events and developments in the period following the 1974 Conference demonstrates that the WPPA has had an important and probably unparalleled impact on various sectors. It also shows, however, that in many respects, the international community has failed both to make more than nominal progress towards achieving the fundamental purposes of the Plan, and to take advantage of its potential as a "policy instrument within the broader context of the internationally adopted strategies for national and international progress."[6]

Direct Follow-up Activities

Among the events that have taken place within the United Nations system since 1974, there are some that constitute follow-up activities directly related to the implementation of the WPPA. Those identifiable are: 1) The Population Commission 18th Session in February, 1975; 2) The five Regional Post-Bucharest Consultations, held between

February and July, 1975; 3) The UNFPA-UN Interregional Consultative Group of Experts on the WPPA, convened in September 1975, and 4) The Population Commission 19th Session in January 1977.

1. In connection with the first of these, two decisions adopted by the Commission, and later ratified by ECOSOC, are worth particular mention, namely the requests to the Secretary-General to:

- obtain "at the national level, in consultation with Member States, a report of the measures adopted, and work being undertaken and planned, by Governments, which they regard relevant to the implementation of the WPPA"[2]; and
- prepare "guidelines to assist...development planners at the national level to take into account population-related factors when drawing up plans for development."

The first of these requests gave rise to the UN "Third Inquiry among Governments: Population Policies in the Context of Development, 1976," that gives insight into the changes occurring at the national level in the perceptions of demographic levels and trends and related policies. It also laid the groundwork for the continued surveillance of events at the country level. In response to the second request a document (E/5780) was, in effect, prepared and submitted to the 61st Session of ECOSOC under the title "Guidelines on Population Related Factors for Development Planners." Promotion of work on this difficult and, up to now, rather undeveloped subject can be traced back to principles enunciated by the WPPA. If, as Article 14 (d) states, "population policies are constituent elements of socioeconomic development policies," it is important to learn how to insert the consideration of demographic factors, their potential consequences and presumed determinants into developmental planning. Evidently in this respect the UN Secretariat is far from being able to give assurance of ability to render adequate advice. After considering the "Guidelines" the ECOSOC returned them to the Population Commission with the request that a "manual on population and development planning"[7] be prepared, a task on which the Population Division expects to work during the biennium 1978-1979.[8]

2. The five regional post Bucharest consultations were undertaken in response to Article 103 of WPPA which invites "countries sharing similar population conditions and problems...to consider jointly this Plan of Action, exchange experiences in relevant fields and elaborate those aspects of the Plan that are of particular relevance to them." Indeed the reports of the consultations reflect the different approaches to the WPPA taken by the five regions, and they provide valuable guidance to the international community, when considering means and ways of helping countries of these regions implement the WPPA. Without claiming to be exhaustive[9] the following summaries illustrate the diverse manner in which regions reacted to the WPPA a few months after its adoption:

> The ESCAP region reiterated its support for the reduction of population growth, having set quantitative targets for declining rates of growth, mortality and fertility. Perhaps a new consensus appearing in the consultation as an outcome of Bucharest, is the reference to the fact that "development is a central factor in the solution of population problems."[10]
>
> The countries of the ECLA region, while recognizing that certain critical situations could arise from the demand for educational, health, housing, and other services generated by their particular population dynamics, persisted in their position of not making any specific recommendations in relation to the rate of population growth. No quantitative targets were proposed, though indirectly some were approved in connection with morbidity and mortality when explicit reference was made to "the goals laid down in the Ten-Year Health Plan of the Americas."[11] Undoubtedly the most important recommendation adopted by the Latin American countries is that related to setting up "high level councils, commissions or other equivalent units, empowered to coordinate action in the field of population," in the countries of the region.[12]
>
> The African consultation revealed more clearly than in any other region the diversity of situations and positions. The report

reflects a consensus between "countries with vast natural resources" where "a high rate of population growth could provide added benefit for development" and those "able to hold larger population" but in which "certain circumstances (economic, social, cultural or otherwise) may not make it possible."[13] Many of the recommendations contained in the Plan were reiterated in the African context. The most prominent departure was that of urging African Governments "to pass legislation permitting qualified medical practitioners to perform abortion on request and on grounds of the health, welfare[2] and survival of either mother and child or both of them." This recommendation is even more striking if one considers that the subject of abortion was completely silenced at the WPC.

The ECWA region took the most radical position in regard to population growth when it declared that "rapid population growth in the area does not constitute an obstacle in the way of socioeconomic development," adding that "there are further indications that the development process may overcome the implications of the continued rise in reproduction rates and the natural increase of population." It emphasized more than any other region the need for adequate statistical data on the various demographic variables.[14]

The ECE countries agreed that the adoption of the Plan had "resulted in the speeding up of the enactment of legislation and the undertaking of organizational and research programmes that might otherwise have been allocated a lower priority." In the majority of countries it has caused "Governments to realize that where previous approaches were not coordinated to resolve population problems, these approaches might be transformed into a considered comprehensive population policy, within the context of social and economic development strategies and plans."[15] The ECE representatives also paid special attention to the recommendation contained in Article 22 of the

> WPPA to reduce "national and subnational differentials" of mortality, calling on WHO to "initiate and coordinate studies of differential morbidity and mortality both in developed and developing countries."[16]

The different regions coincided in recognizing the right to access to information and services, provided by the State, enabling persons to achieve desired family size. There was also generalized agreement on paying particular attention to the topic of geographic distribution of the population with special reference to internal and international migration. The need for research also received wide recognition.

3. The UNFPA-UN Interregional Consultative Group of Experts on the WPPA was convened with the avowed purpose of considering "overall programmes, priorities, sources and coordination of assistance in relation to the implementation of the WPPA." A reading of the Draft Report of the Meeting[17] reveals that it came far from accomplishing this objective, and that there was considerable dissensus among participants. The recommendations are numerous and of a rather general character. In all likelihood they have been of little practical value to the organizations convening the meeting. In the opinion of the writer the reason for the apparent failure of the consultation was the attempt to get advice of general application from scholars and technicians coming from regions and countries with very diverse developmental and demographic situations, and at different stages of "maturity" in the formulation and implementation of population policies. Any attempt at implementing the WPPA has to take well into consideration one of the principles stated in its paragraph 14 to the effect that "(i) Recommendations in this Plan of Action regarding policies to deal with population problems must recognize the diversity of conditions[2] within and among different countries." In other words, to proceed with the implementation of the Plan at the national level requires at least an approximate knowledge of the conditions of the country in

question in terms not only of its population trends, but also of its economic, social and political situation, not disregarding the position prevailing at the governmental level in relation to population policies. Of course, from these individual diagnoses some generalizations would eventually be possible and some programmes of wider application could be developed.

4. The 19th Session of the UN Population Commission is the first in which the results of the monitoring of population trends and policies requested by the WPPA (Article 107) was examined by Government representatives. At the time of writing, the author has only had access to the basic documentation prepared for the meeting. Perhaps the Report on the 19th Session contains very specific references to implementation of the Plan. The impression received from reading the documentation available, though, is that the Commission concentrated on examining demographic trends as reported by the Secretariat, and trends in policies as reported mainly through the Third Inquiry Among Governments. It also paid particular attention to the organization of the review and appraisal of progress made towards achieving the goals and recommendations of the Plan to be undertaken every five years by the United Nations system (Article 108).

Other Post-Bucharest Activities

Four World Conferences on Food, Women, Habitat, and Employment plus the Seventh Special Session of the UN General Assembly took place in the two-year period following the adoption of the WPPA. The preamble to the Plan declares it "a policy instrument within the broader context of the internationally adopted strategies for national and international progress," and the Background to Plan states that it "must be considered as an important component of the system of international strategies." This being the case, one would expect that instruments emanating from these four conferences would have made very explicit references to what could legitimately be called the world strategy on population matters. Unfortunately this did not happen: there were few references to the WPC and the WPPA, and, in some instances, no reference at all. Very little recognition was made of the apothegm so insistently repeated in the Plan that "population and development are interrelated" and that "population variables influence development variables and are also influenced by them," (Article 14 (c)). This could be interpreted as implying that the international community still has a long, and perhaps very difficult, road to follow in order to move from mere declaration of principles to effective action in understanding the network of relationships among economic, social, cultural, and political factors determining demographic processes, and the possible avenues of intervention to affect these processes in order to "coordinate population trends and the trends of economic and social development" - the explicit aim of the WPPA. The evident lack of coherence and continuity cannot be attributed only to the fact that, in some cases, government representatives, not being the same at all meetings, might emphasize different aspects of the constellation of problems. The idea that the most promising approach to the problems of development is through a coordinated attack on all of the underlying factors responsible for a given socioeconomic situation has yet to permeate most national political structures.

1. The World Food Conference adopted only one short Resolution (IX) specifically devoted to population in which it recognized "that the increasing demand for food is related in particular to the unprecedented population growth."[18] But when referring to the "right to determine the number and spacing of births," the same resolution failed to go as far as the WPPA by limiting that right with the provision that it should be exercised "in accordance with national needs." By contrast, there is no reference in the Declaration adopted by the Conference on the Eradication of Hunger and Malnutrition to population policies or their relation to agrarian or other policies. Perhaps greatest complementarity between the two conferences can be found in the recommendations regarding rural development (Resolution II in Food Conference and Article 46 (e) and Resolution I of the Population Conference).

2. The World Conference of the International Women's Year came closer to reinforcing in several respects the decisions taken at Bucharest. Article 32 (b) of the WPPA states that among the development goals having an "effect on the socioeconomic context of reproductive decisions that tend to moderate fertility levels" is that of "the full integration of women into the development process," and goes on to point to some of the means by which this might be accomplished. Here one can point to perfect coherence between the approaches of the two conferences. Implementation of their recommendations should be mutually reinforcing: fuller integration of women into societal roles should have a significant impact on reproductive behaviour. Both conferences recognized: a) the need for achieving equality of status for men and women in the family and in society; b) the right to enter into marriage "only with the free and full consent of the intending spouses" (WPPA Article 39 (d)); c) "the right of individuals and couples to determine freely and responsibly the number and spacing of their children"[19]; d) the close interrelation of social, economic and demographic factors ("Change in one or more inevitably[2] involves changes in others")[20]; and e) the legitimacy of having population policies and programmes, within the framework of overall development plans.

3. Only in the Final Report on the Conference on Human Settlements did the author find an explicit reference to the WPPA. The reference appears in Chapter II devoted to "Recommendations for National Action,"[21] where it is determined that each country must act with urgency to establish a national policy on human settlements that takes into account the distribution of the population in the national territory.

It is stated that the WPPA is one of the items to be considered (the last one on the list). Perhaps it is a biased interpretation, but it appears to the author that the recommendations adopted in Vancouver remove the whole area of population distribution from the domain of those responsible for population policies both at the national and international level. A careful study of the recommendations of the two conferences is needed in order to find out where their recommendations are, indeed, complementary and where they might give rise to uncoordinated action.

4. At the time of writing the author did not have access to the Report on the World Employment Conference, but judging from the content of the Report submitted to the Conference by the Director General of ILO, it can be surmised that the population topic, more precisely that of population policies, was noticeable by its absence from the deliberations. In part II of that Report dealing with National Strategies under the section on Social Policies, it is stated that "it would not be appropriate to discuss in this report the *still controversial issue of population policies*."[22] From the ensuing discussion it appears as if these *policies* were considered as referring primarily to family planning.

5. The main agreements reached during the Seventh Special Session of the General Assembly were registered in Resolution 3362 (S-VII) adopted on September 16, 1975. It is not possible to find there even an indirect reference to population. Barnett F. Baron[23] has tried to discover a link in a recommendation included in Part III Paragraph 9 of that Resolution, to the effect that WHO and UNICEF intensify efforts aimed at improving health conditions in developing countries by providing, among other things, "primary health services to the communities, including maternal and child health and family welfare." Baron offers some interpretations of the lack of attention to population by the Seventh Special Session of the General Assembly, namely the desire to avoid an ideological issue that can be divisive; the acceptance by the Assembly that population need not be a separate issue when discussing socioeconomic transformation, in line with the spirit of WPPA itself; and the fact that the Special Session was mainly understood by the developing countries as an occasion for stating what the developed world "owed" them and not for dealing with matters of national policy.[24]

Without denying that some of the preceding statements help to explain what happened to the topic of population at the Seventh

Session, the author believes that it constitutes another example of the lack of general agreement on the need to tackle development with a coordinated attack on a constellation of socioeconomic problems, one of which is population.

The Post-Bucharest Response of UNFPA and the Specialized Agencies

Perhaps one of the most direct responses to the WPC and the WPPA on the part of UNFPA, in terms of definition of principles and statement of aims and purposes, is contained in the Report submitted by its Executive Director to the Twenty-second meeting of the UNDP Governing Council in June 1976.[25] In that document the Executive Director, while reaffirming the aims and purposes which ECOSOC originally assigned to the Fund, pointed to the need of changing emphasis in certain areas. For example, he recognized that awareness-creating activities should focus "more on reaching important population groups such as women, youth, local community leaders, religious, and political groups." He foresaw that assistance to countries will have "to be limited in time and phased out gradually"; and that, in this connection, priorities will have to be applied. The idea of adopting some "population-related grouping of countries" to organize the granting of the limited resources of the Fund is mentioned in this context as a means of assigning priorities. In fact, the Report proposes a group of 54 countries to be designated Priority Countries for Population Assistance (PCPA) which would receive 75 percent of the funds available. These countries are identified on the basis of the following demographic threshold levels:

rate of population growth of 2.5 percent per annum;
level of fertility in terms of gross reproduction rate of 2.5;
infant mortality of 160 infant deaths per 1,000 live births; and
population density on arable land of 2 persons per hectare.

Support to countries would include advice regarding the "setting of priorities in accordance with their established population objectives." Preference would be given to "activities designed to strengthen the recipient countries self-reliance in population matters and benefit disadvantaged population groups." Among the projects promoting self-reliance which the Fund would be sympathetic to funding are "operational research and pilot projects exploring innovative approaches." UNFPA is "seeking ways to identify development programmes into which population activities can be integrated....In such collaborative efforts, the UNFPA should be prepared to fund the population components while other development assistance bodies support the other components of integral programmes." The Fund intends to pay particular attention to "disadvantaged and vulnerable population groups."

The UNFPA decided, as directed by the UNDP Governing Council, to give preference to country and regional projects, and to devote a rather modest proportion of its funds to interregional and global projects. A proposed "thorough study by region or subregion on the types of basic population activities required" should prove useful in further refining priorities. These could undoubtedly be revised periodically with the help of the "newly established machinery for monitoring UNFPA supported activities."

After the approval by the UNDP Governing Council of the UNFPA criteria for setting priorities, the Fund had to translate these into the proposed budget for 1977-1980. A review of this budget reveals that the project category to which the majority of the funds have been assigned is that of family planning (58.8 percent). This constitutes a significant departure from the period 1969-1975 when family planning was allotted 39.3 percent.

Because of the manner in which the report on activities of the UN specialized agencies for submission to the Population Commission[26] is prepared, it is difficult to pinpoint activities by organization and to establish clearly whether or not they were on-going projects at the time of the WPC or constitute a response to it. The report emphasizes activities in two categories of the Standard Classification of Population Activities (SCPA), namely Population Dynamics (SCPA 200) and Fertility and Family Planning (SCPA 400). The first of these categories includes activities under the heading of population and development. While the pertinent part of the report claims that "work programmes of the bodies of the United Nations System...have expanded significantly," it is difficult to discover new innovative approaches to the study of the subject. Perhaps among the most novel subjects mentioned in this section are one on "income distribution and social disparities as related to mortality, fertility and migration," and another, a programme which "focusses on the integration of demographic variables in development strategies and population policies." Several projects seem to be planned or already underway trying to relate income to demographic factors.

One development is evident from the description contained in the document referred to above in regard to expansion of Fertility and Family Planning. This expansion was already underscored when discussing the UNFPA 1977-1980 budget allocations. On a more positive note, it appears that some attention will be devoted to the analyses of the World Fertility Survey data that are starting to become available. Another approach which would be considered as attempting to answer some of the concerns raised as a consequence of Bucharest is the involvement of the UN Division of Public Administration in the study of certain pertinent aspects of family planning programmes.

The UNFPA budget allocation assigns 2 percent of the total budget for 1977-1980 to the Population Policy category, the same proportion allotted during the years 1969-1975. But while for the earlier period the annual average assigned to this category was U.S. $580,000, this average will amount to $2,418,000 in the next four years. It is to be regretted that the document describing the activities of the bodies of the UN system working in the field of population did not attribute more importance to the description of projects in this area. Apparently the newest addition to the programme is that related to "institution-building" for population policy purposes. It seems as if the pertinent members of the UN system are still in search of means and ways of collaborating in this important field.[27]

The Post-Bucharest Response of the Community of Donors

Inertia is not only a characteristic of demographic behaviour and international bureaucracies; it also affects the community of donors in the population field. Two and a half years is, however, too short a time to expect pronounced changes in the priorities donors attach to different components of the field. There are, as in other cases, commitments to on-going projects, mechanisms for approval of programmes and budgets that operate under schedules difficult to modify, and, above all, deep-seated convictions as to what is important and pertinent in the population field. Because of all these constraints, earlier evaluations of the impact of Bucharest upon donors' attitudes have arrived at the conclusion that it has been rather insignificant.[28] The author tends to disagree with that perception. Perhaps she can be told that some of the signs of change pointed out below were already in the making when the WPC met. Even so, they represent in her opinion changes that relate to the approaches that were so ardently discussed in Bucharest.

The first symptoms of change are the "introspection" exercises which have recently been undertaken by some of the donors, in some instances through external advisers, as in the case of the World Bank and the IPPF, and in others as an internal review, such as that conducted by the Population Council. The International Review Group of Social Science Research on Population and Development, which is being sponsored by nine donors, including UNFPA, could also be taken as an indication of their desire to receive guidance in connection with important aspects of the implementation of the WPPA.

It is perhaps too early to evaluate the influence of the Berelson Report on the World Bank's population programme. There are some indications that the Bank will consider utilizing some of its projects for what has been termed "controlled experimentation." There should also be no doubt that the Bank will attempt to evaluate and monitor the population impact of its activities in sectors other than population more closely. In-depth studies of population and development in a half dozen countries are a strong possibility. The research programme would include topics such as: Population Growth and Savings, Women's Activities and Fertility, and Education-Fertility Relationships, all of great current relevancy.

The internal review undertaken by the Population Council led to a significant reorganization of its structure and objectives. Paramount among the changes is the establishment of the Center for Policy Studies. While retaining interest in the development of new contraceptive techniques and the delivery of family planning services the Council is broadening its field of concern to include topics that fall in line with issues arising from Bucharest.

A significant new approach may be developing within the USAID population programme, judging from a study conducted in Pakistan with AID's support entitled "Population Impact of the Development Perspective." The preface to the Preliminary Report states that the idea "originated with the observation that it might be possible to assess the impact on population growth of government policies, programs and projects which have specific objectives other than that of affecting the rate of population growth" - a concept closely related to the discussions held at the WPC. An extension of this approach is presently included in pending legislation that would require assessment of the impact on growth of all development projects financed with U.S. foreign assistance. Implementation of this proposal would present challenging difficulties considering that existing socioeconomic research provides a less than completely adequate base for such evaluations. Nevertheless, the proposal might have an important impact, provided that those responsible for its execution do not fall into the simplification of once more attributing miraculous benefits to fertility reduction, or into the danger of selecting projects on the basis of criteria to which host countries attach minor or no importance.

The Ford Foundation appears to be giving "major emphasis to development of capacity for research and linkages to policy in the developing world."

30

A closer scrutiny of the programmes being supported by other donors might also reveal some change in emphasis. Unfortunately the author has had access to rather broad descriptions of these programmes where she has been unable to detect any significant reorientation of efforts.

The preceding comments refer to modifications in donor attitudes, not to changes regarding the actual amounts available for support of new innovative projects. While there is no denying that funds for population have apparently been more difficult to obtain and have not increased in the last few years, the author has not given much importance to a comparison of the funds available for population projects before and after Bucharest because of her conviction that "where there is the will, there is the power." The somber predictions about diminishing funds for population, while certainly not unrelated to the economic situation of the donor countries, is also perhaps related to the dissatisfaction of an important group of donors with the results of the WPC.

Recent Demographic Trends and Positions of Governments Post-Bucharest

As would be expected when an instrument such as the WPPA is adopted to guide the actions of countries and international organizations in the population field, many sectors (governments, UN organs and Secretariat, donors in the field, non-governmental organizations, population scholars, journalists, etc.) become interested in learning about its impact through time. The information sought relates both to the behaviour of governments vis-à-vis the adoption of measures to implement the recommendations of the Plan and to the evolution of given demographic variables.

Under the Chapter on "Recommendations for Implementation," the WPPA itself contains a section comprising three articles devoted to the "monitoring of population trends and policies" and to the "review and appraisal of progress made towards achieving the goals and recommendations" of the Plan.[29]

It vested responsibility in "appropriate bodies of the United Nations system." Complying with these provisions, the UN Population Commission met last January to examine the results of the first exercise of monitoring population trends and policies. The comments below draw on the two documents[30] submitted by the Population Division to the 19th Session of the Commission.

Changes in Governments' Perceptions of Demographic Factors and of Population Policies

The first evident fact, when evaluating changes in the population policies field since Bucharest, is that the number of countries whose governments have adopted population policies with whatever content, remain significantly the same (around 40), with Peru (September 1976) being perhaps the latest addition to the list. The Bucharest impact can be primarily detected in the efforts of several governments to streamline their programmes (even designating such changes as the adoption of a "new policy") and to the overhaul of the corresponding administrative machinery. Perhaps the best examples are India, where compulsory sterilization has been suggested at the state level and an increasing use of abortion is being attempted; Bangladesh, where the policy has been broadened towards a multi-sectoral approach; and Pakistan, where efforts are being made to adopt the so-called "development perspective" in connection with modification of the variables towards which the policy is aimed.

The document in which the UN Population Division summarizes the result of monitoring population policies is based primarily on the replies to the "Third Inquiry among Governments," and refers to the situation existing around July 1, 1976. The document does not attempt to present the current situation regarding the operation of population policies in countries having one, and limits itself to recording what have been labeled government "perceptions" regarding certain demographic factors and population policies. Some very striking facts emerge from an examination of the pertinent tables.

1. In 48 developing countries, comprising 81 percent of the population of the less developed regions, governments express the desirability of lower rates of population growth; a situation that cannot be considered significantly different from that prevailing before the WPC, but which, if the desires were accomplished, would have important implications for the projections of the world population to the year 2000. If the actual evolution of the growth rates were to follow the trends desired by governments, the UN estimates that the world population in the year 2000 would be 5,972 million, implying a reduction of more than 280 million from the total calculated with the "medium variant" of previous projections. In the face of this conclusion, the document stresses the importance of better helping "governments realize their aspirations, rather than to try to change them." This conclusion undoubtedly constitutes a guide for action both at the national and the international level.

2. "Only 24 countries out of 156, divided equally between developed and developing countries, perceive no problems related to their rates of natural increase."

3. "The number of countries having recourse to exclusively demographic options (in their efforts to modify population variables) is very limited," but "only 13 countries use the whole range of possible options."

4. "In the developing countries, two main trends are emerging in the perception of problems related to mortality: a virtual universal awareness of excess mortality among very small children, and of the disadvantaged position of the rural population."

5. A significant change has occurred as to the number of developing countries (54) that in 1976 considered their levels of fertility as "too high" as compared with those in 1974 (42). Even after considering that the total number of countries surveyed has changed in the intervening period, the proportions continued to show an important shift of opinion (39.6 percent in 1974 against 47.4 percent in 1976).

6. Of the preceding 54 countries, 40 have actually taken measures directed toward reducing fertility.

7. "Only 15 countries in the world limit access to modern contraceptive methods." This number is split almost evenly between developed and developing countries.

8. "Abortion has made little progress as an instrument for action on the overall fertility level."

9. Only 19 countries (13 developed and 6 developing) find acceptable the spatial distribution of their populations. "A majority of 100 countries wishes to slow down the flow of migration" and "only 17 have policies aimed at reversing migration."

10. Governments' attitudes toward international migration, both immigration and emigration, have changed, but mainly as a result of considering other than its demographic consequences.

11. There has not been any significant action taken among most developing countries to establish administrative machinery for dealing with population policies. "The establishment of permanent or temporary institutions of the above-mentioned type has been more widespread in the developed than in the developing countries." Because of this and other obstacles, the integration of population policies into overall planning continues to remain little more than an aspiration.

12. "In 1976 a dual trend in the formulation of demographic policies may be observed: on the one hand, there has been a universalization of some forms of intervention which are purely demographic but which have elements that they had previously lacked; and, on the other hand, there is almost general recourse to intervention designed to act on several levels at once."

13. The interest in population matters is reflected by the fact that the number of countries responding to the different inquiries carried out by the United Nations has been increasing, as witnessed by the following figures:

1963	53
1974	74
1976	103

While these figures should be considered in relation to the number of United Nation members in each of the years mentioned, they do reveal an increasing concern on the part of governments for population issues.

Demographic Trends

As has been pointed out repeatedly, any efforts at detecting changes in demographic trends among developing countries, especially within rather short spans of time, are always faced with the deficiency and in certain cases, the unavailability of data. It is very difficult, unless one refers to a rather limited number of cases, to have an overall view of a country's demographic situation. This is why recent reviews[31] have referred to groups of countries or regions, highlighting certain cases deemed important because of the size of their populations. Even in these cases the situation is examined at the aggregate national level, which gives only partial insight into possible on-going changes. This difficulty points to the need for devising and applying means of obtaining current data on the basic demographic variables and making an effort to go beyond national aggregates so that a true monitoring of emerging trends can be established.

In spite of the shortcomings mentioned above, it is possible to advance certain conclusions as to how general demographic trends have been evolving since 1950. The Population Division document mentions:

1. "Momentous breaks with the past."
2. "Enormous regional disparities." The present overall difference of more than 1.5 percentage points between the growth rate of the less and more developed regions "might well be found to exceed the largest disparities at any period in human history."
3. In the developed regions, "rates of natural increase have slowed down to a point where near-equality of births and deaths could soon be in sight."
4. In the less developed regions the average rate of growth "is today not far below 2.5." Increasing numbers of developing nations "give recent signs of decelerating growth."

5. One of the striking features of observed patterns of demographic change has been "the speed with which they have emerged." Precipitous declines have occurred in the fertility of the developed regions and an equally precipitous decline in the mortality of the less developed.

6. "For the first time in the modern era, a technological ceiling on length of life is being approached throughout today's developed regions." The average longevity in the less developed regions rose significantly more than the increase experienced by the developed regions, thus creating a "massive international convergence of survival prospects" that "matches or exceeds the degree of convergence to be found in any major sphere of social behaviour during the 20th century."

7. International migration movements have not escaped the "innovative patterns of change." The European Continent turned from being a net sender to becoming a net receiver; there has been an acceleration of migration from the less developed to the more developed regions.

8. "Unprecedented change and drastic transitions in the scale and growth of world urbanization." The global urban population more than doubled in the last twenty-five years, "implying a greater increase than in all previous history." Last year "a new demographic milestone was reached when the urban size of the less developed regions became equal to that of the more developed regions."

9. Contrast between trends in the rural population of the more and less developed regions are also outstanding. The former have been losing rural population in the last 25 years, while in the latter rural population continued to increase at rather high rates. The ratio of rural inhabitants in the less to the more developed regions "has accelerated in probably an unparalleled fashion" from over a 3 to 1 in 1950 to a 6 to 1 margin in 1975.

10. It seems fair to infer that "the gap between infant mortality in the less developed areas and the more developed regions as a whole, has fallen greatly since 1950."

11. Contrary to what has happened with mortality, the gap between the levels of fertility of the two areas not only has not narrowed, but has probably increased. "The current ratio may well be the highest in centuries, perhaps the highest in millenia."

12. While convergence of fertility trends is apparent in the developed regions, "significant widening of national differentials" seem to be the case in the less developed areas.

13. "Fertility has begun to decline by significant amounts in a growing number of countries, which had presented until very recently high levels of fertility." It cannot be discarded that this downward trend will be more rapid than that experienced by the industrialized nations.

The preceding summarizes the main perceptible demographic trends. Their aggregated nature provides an insight as to how the world population variables are evolving. They are of less direct value for specific programmatic action at the country level, but nevertheless point to areas to which action should be directed in order to strengthen the continuation of emerging positive trends and to avoid the continuation of undesirable ones.

Conclusions

This review of the gamut of events and activities, and changes in attitudes that have taken place since the adoption of the WPPA should not leave any doubt that the WPC had considerable repercussions in the population field. If anything, these repercussions are only beginning to become evident and more changes should be expected, especially if all interested sectors (national governments, intergovernmental organizations, and non-governmental organizations) continue to look to the WPPA for stimulus and guidance in the search for ways and means of changing those demographic trends considered as unacceptable or unsalutary.

The WPPA stands out as a potentially strong political instrument. A re-reading of the preceding pages has led the author to advance some recommendations to strengthen its implementation.

The preceding analysis of post-Bucharest events shows that there continues to exist an incongruity between the declared aims of the WPPA and the treatment of population matters in other spheres of activity within intergovernmental bodies, particularly those of the United Nations. A concerted effort should be undertaken to achieve a convergence of positions regarding population in all economic and social strategies guiding efforts at the country level. The reports of the world conferences on the Environment, Food, International Women's Year, Human Settlements, and Employment should be reexamined for leads as to how to accomplish stronger coordination and complementarity of efforts among the different institutions with specific responsibilities in areas related to topics covered by those Conferences. The UN Population Division in collaboration with UNFPA could possibly play an important role in this regard.

There are other actions that could help to produce the needed convergence of efforts. Some stand out not only as evident, but as rather easy to take. In certain instances the actions suggested below are perhaps not even original, since they have undoubtedly been advanced on other occasions. Their only merit may arise from the fact that they are placed against the background summarized in this paper.

Apparently, creating an awareness of population issues continues to be of paramount importance among the countries and organs of the UN system, as well as among the Secretariats of the latter.

The population activities of the Secretariats of certain intergovernmental bodies within the UN system and of some departments of the United Nations proper, appear to be marginal to the efforts to implement the WPPA. Special efforts should be made to develop a coherent and integrated "population programme" for the entire UN system. The programme should be geared so as to deepen and expand activities in those fields for which significant support exists among member countries, giving emphasis to those activities that are already showing some promise of stimulating desired changes in demographic behaviour. In this regard, particular attention should be

38

paid to the diversity among regions, and among and within countries. A careful rereading of the reports and documents of the post-Bucharest regional consultations is bound to give greater insight into potential lines of action for a concerted attack on some of the problems highlighted at those meetings.

One would have thought that two and a half years should have been ample time to have overcome existing limitations and to have effected innovations within the system. The statements recorded elsewhere in this paper show, however, that the system is still seeking to define the type of collaboration needed in order to "further develop" activities related to the formulation and implementation of population policies.

It appears that an in-depth study should be undertaken to determine how the existing "population programme" might be revised to reflect more clearly the concerns that were expressed at Bucharest.

A field which is in evident need of a wider commitment from the UN system is that of the integration of population policies into overall planning. A related subject is the development of institutional organizations to deal with these policies. It might well be advantageous to organize an active technical assistance programme at the international level to render advice to developing countries attempting to set up or reorganize high level government units responsible for population policy. The international character of the programme would help overcome the potential limitation that arises from the shortage of skilled professionals experienced in bridging the gap between population studies and public policy. Furthermore, it would facilitate standardization of procedures in areas where this would not interfere with the required specificity at the national or subnational level.

In line with the basic principle emphasized in the WPPA that population and development are interrelated, institutions of the UN system granting financial support to development programmes should seriously investigate the possibility of including a population component in their assistance, and should also attempt to evaluate the impact on population variables of selected projects that they are endeavouring to finance upon termination of these projects.

The donor community plays an important role in determining the direction to be taken by population activities. This paper has pointed to what have been identified as changing emphases in certain aspects of the donors' programmes. The trends toward new approaches should be reinforced, paying particular attention to leads emanating from Bucharest. One can be hopeful that a new, less pessimistic evaluation of the potential impact of the WPPA would be conducive to the enlargement of funds available for population projects or, perhaps, to a reorientation of investments toward new initiatives likely to be less expensive than those insistently applied in the past with rather modest results.

The monitoring undertaken by the United Nations, and to which reference was made above, revealed the emergence of important changes in demographic behaviour. Events such as rapid declines in fertility from "pre-transitional" levels offer researchers unprecedented opportunities to study the origins of fertility decline and to discover the factors that lie behind these phenomena. Knowledge of how these behavioural changes are determined would have implications not only for the type of policy decisions that could help reinforce these new trends, but also for the possibilities of replicating them in other contexts. Similarly, the results of the Third Inquiry indicate that there are new opportunities to study countries in which several policies for stimulating demographic change are being implemented at the same time. Understanding how different policies operate could help to strengthen those deemed more effective for the attainment of the goals in question.

This paper has shown that some new initiatives in population assistance are being explored or are being proposed for exploration. Some of these innovations should be more carefully studied before firmer and wider application is made of them. Two examples are discussed below.

1. While the proposal made by UNFPA for adopting a "population-related-grouping-of-countries" criteria could turn out to be a useful

tool for devising programmes applicable to several countries at once, the "thresholds" that have been proposed have several defects. The values of the relevant demographic variables are often difficult to establish, even within quite wide limits. Also, since these values refer to national averages, in concrete cases they could hide important differences between sub-groups of the same population. In these respects the grouping of countries proposed leaves much to be desired. Furthermore, even though priorities are indispensable to the granting of international aid, the strict application of the UNFPA criteria might not necessarily lead to helping governments fulfill their expressed aspirations regarding demographic goals, a principle that should constitute the cornerstone of international technical assistance.

2. The second example concerns experimental projects which have been cited as a means to explore innovative approaches. These are usually plagued by numerous problems, as Cuca and Pierce[32] have shown, and it seems that greater attention should be paid to their true potential.

Finally, it is evident that detecting progress in the implementation of the WPPA will depend, among other things, on close scrutiny of developments at the country level. Considerable attention should be paid to the plans for the review and appraisal called for in Article 108. These reviews should go beyond the global and regional levels, even if selectively, so as to be able to identify activities that could have multiplicative effects. It should also be recognized that there will be few opportunities to periodically monitor trends in demographic behaviour unless current demographic data become more widely available. The implementation of innovative methods for early detection of changes in demographic variables is, therefore, indispensable.

In connection with the review and appraisal, perhaps it would be advisable to study carefully the situation in the few remaining countries that impose restriction on access to modern contraceptive methods in order to understand the motives behind the disregard of this basic human right.

A final rather broad conclusion emerges from the preceding pages: the task of implementing the WPPA, and eventually modifying it, must be a continuous one. Ingenuity, intent of purpose, and devotion to the higher values of mankind are required from all sectors concerned if the goals of coordinating population trends and the trends of economic and social development are to be accomplished.

FOOTNOTES

[1] Some representative examples are:

Demeny, Paul. Population on the World Agenda - 1984. Comments delivered on August 28, 1974, at the Population Tribune organized in connection with the United Nations World Population Conference in Bucharest, Rumania.

Parker Mauldin, W., Choucri, Nazli and others. A Report on Bucharest. "The World Population Conference and The Population Tribune," August 1974. In *Studies in Family Planning*, Volume 5, Number 12, December 1974.

Tabbarah, Riad B. "Population Policy Issues in International Instruments: With Special Reference to the World Population Plan of Action." In *The Journal of International Law and Economics*. Volume 9, Number 3, December 1974.

CELADE. Implications for Latin America of the World Population Plan of Action. ST/CEPAL/CONF. 54/L.4, January 20, 1975.

Tabah, Leon. New Emphasis in Demographic Research after Bucharest. UNFPA/WPPA/12. September 3, 1975.

"The Significance of the Bucharest Conference on Population." In *International Social Science Journal*. Vol. XXVII, No. 2. 1975, pp. 375-384.

Urquidi, Victor L. The Positive and the Negative of Bucharest. Paper prepared for the UNFPA/UN Interregional Consultative Group of Experts on the World Population Plan of Action. Geneva, September 1975.

Finkle, Jason L. and Crane, Barbara B. "The Politics of Bucharest: Population Development and the New International Economic Order." In *Population and Development Review*. Vol. 1, Number 1, September 1975, pp. 87-114.

Berelson, Bernard. "The World Population Plan of Action: Where Now?" In *Population and Development Review*. Vol. 1, Number 1, September 1975, pp. 115-146.

[2] Underscoring added by the author.

[3] The topics of the WPC were distributed as follows: Plenary sessions, "Recent Population Trends and Future Prospects"; First Committee, "Population Change and Economic and Social Development"; Second Committee, "Population Resources and the Environment"; Third Committee, "Population and the Family"; and Working Group, "The World Population Plan of Action."

[4] Numbers in parentheses refer to the corresponding paragraph of the WPPA. Underscoring added by the author.

[5] Tabbarah, *op.cit.*, has pointed out that one of the main achievements of the Plan of Action was that while it was a consensus document, it has nevertheless made "advances" beyond the "base line" of previously accepted decisions on most of the important topics covered by it.

[6] United Nations. E/CONF.60/19, The World Population Plan of Action. First introductory paragraph.

[7] The Manual should "include such aspects as the cause-and-effect relationship between demographic and developmental factors with special references to planning, techniques of incorporating demographic variables in development planning, and demographic-economic models for development planning." UN Population Commission, 19th Session. Document E/CN.9/327, November 11, 1976.

[8] UN Population Commission, 19th Session. Document E/CN.9/331, November 23, 1976, p. 23, Paragraph 89.

[9] For a detailed comparison of the Asian, Latin American and African consultations see: Saunders, Lyle and Leonard, Ann. "Population Policies and Programmes Post-Bucharest," The Ford Foundation. June, 1975. A summary of the proceedings of all five consultations is included in UNFPA/WPPA/14/Rev. 1, October 1, 1975. Result of the Regional Consultations Subsequent to the World Population Conference.

[10] E/CN.11/1208, January 29, 1975. Follow-up action on the decisions and recommendations of the WPC.

[11] ST/ECLA/CONF. 54/L.9/Rev. 1, March 31, 1975. Second Latin American Meeting on Population. Report of the Meeting, p. 43.

[12] *Ibid.*, p. 36.

[13] Economic Commission for Africa. Regional Post World Population Conference Consultation. E/CN.14/POP/135, March 11, 1975, Paragraphs 10 and 11.

[14] United Nations. ECWA, Final Report on the UN/UNFPA Post World Population Conference Consultation.

[15] ESA/P/AC.5/5, August 18, 1975. UN/UNFPA Post World Population Conference Consultation Among Countries of the ECE Region, p. 16.

[16] *Ibid.*, p. 20

[17] UNFPA/WPPA/20. Draft Report of the Meeting, October 17, 1975.

[18] United Nations. E/CONF.65/20, Report of World Food Conference, p. 11.

[19] United Nations. E/CONF.66/34, 1976. Report of the World Conference of the International Women's Year. World Plan of Action for the Implementation of the Objectives of the International Women's Year, Paragraph 142.

[20] Ibid., Paragraph 135.

[21] United Nations. A/CONF.70/15, 1976. Report on Habitat. The United Nations Conference on Human Settlements.

[22] International Labour Office. Geneva, 1976. Employment, Growth and Basic Needs: A One-World Problem. Report of the Director-General, pp. 59-60.

[23] Baron, Barnett F. "Population and the Seventh Special Session: A Report." In Population and Development Review, Vol. 1, No. 2, p. 303.

[24] Ibid., pp. 303-304.

[25] DP 186, May 21, 1976. All quotations are from this Report.

[26] United Nations. E/CN.9/328, November 22, 1976. Concise Report on Activities of the Bodies of the United Nations System Working in the Field of Population.

[27] In this connection the report already cited in Footnote 26 states that "after the consideration of how the system can further develop its activities related to formulation and implementation of population policies, there should be a better indication of what type of collaboration is required among the bodies of the United Nations in their respective fields of interest."

[28] Saunders, Lyle and Leonard, Ann, op. cit., pp. 64-73.

[29] United Nations. E/CONF.60/19, The World Population Plan of Action. Chapter D, Section 3, Articles 107-109.

[30] E/CN.9/323, November 8, 1976. Concise Report on Monitoring of Population Trends and E/CN.9/324. Concise Report on Monitoring of Population Policies.

[31] Parker Mauldin, W. "Fertility Trends: 1950-75." In Studies in Family Planning, September 1976, Vol. 7, No. 9.

[32] Cuca, Roberto and Pierce, Catherine S. "Experimentation in Family Planning Delivery Systems." The World Bank, August 1976. See also: Coombs, Philip H., "Pilot Projects with a Future." Document submitted to the Tokyo International Symposium. Tokyo, April 1977.

THE INTERNATIONAL REVIEW GROUP OF SOCIAL SCIENCE RESEARCH ON POPULATION AND DEVELOPMENT (IRG)*

Carmen A. Miró

How it originated?
How is it organized?
How its members defined its task?
What has been accomplished up to now?
What is its expected final product?

I must begin by apologizing to those of you who may be familiar with some of the information which follows; please bear with me for the benefit of those participants that know little about the International Review Group.

Also, I would like to underscore that I have not cleared this statement with the members of the Group. It is my belief that they would in general subscribe to the interpretation of the facts and the views expressed here, but some disagreement might not be entirely discarded.

The idea of organizing a group to review social science research on population and development is traced back by its originators to the February 1974 Bellagio Conference. It nevertheless took the interested donor agencies a whole year to arrive, in February 1975, at the decision of pursuing the idea of conducting an independent survey of knowledge and research particularly relevant to population policy.

Soon after that the search was begun for a person with experience in the population field who could serve as chairman of the group, and for potential members of the group. A preliminary organizing meeting was held in Mexico in February 1976, an entire year after the interested agencies approved the idea of sponsoring an IRG. This meeting, attended by scholars from the developing world and donor agency representatives, approved what can be considered as the basic guidelines for the organization of the IRG. As background for discussion of the nature of the task, persons attending the meeting had access to a document containing a personal appraisal of social science research on population and development prepared for the occasion by Bernard Berelson, and a paper prepared by Raul Urzúa on perceived policy issues in one region of the developing world - Latin America.

---

* Statement presented orally by Carmen A. Miró on the occasion of the Bellagio IV Population Conference.

Finally, after appointment of the chairman, the IRG headquarters were established at El Colegio de México, which had agreed to sponsor the operation of the Group. In addition, IRG was successful in obtaining the financial support of a broad based group of donors, nine in all: two international agencies, one Canadian, three European and three private U.S. foundations.

The chairman began to recruit IRG members in August 1976, and the first meeting of the Group took place at El Colegio de México in early October. It can therefore be said that the Group has been in operation for about nine months, although its chairman, as would be expected, started somewhat earlier.

With no previous working experience with a group similar in nature to the IRG, I decided, as to its organization, to generally follow the lines that had been laid down by the interested donors during their 1975 meetings.

IRG is an independent and autonomous ad hoc group of seven members (including the chairman) that serve in their personal capacities for a period of 18 to 24 months. Members are expected to commit about six weeks of their time in a year, with the exception of the chairman who devotes approximately 50 percent of the time to the Group. The members were selected with due regard for an appropriate geographic balance, taking into consideration their expertise in various aspects of the population field, and their knowledge of the region from which they come. A member of the Group, not only knowledgeable of the field, but also well informed of the trends prevailing among the main population donors, and coming from a developed country, completes the geographic balance.

The present members of the Group are: Bernard Berelson, well known to all of you; Prasannavadan D. Desai, from India and until very recently Director of the Institute of Economic Growth of Delhi University, where he continues to work; he is responsible for the region that can be identified as Middle South Asia (Afghanistan, Bangladesh, India, Iran, Nepal, Pakistan, and Sri Lanka). José Encarnación from the Philippines, Dean of the School of Economics of the University of the Philippines; he has been given responsibility for the other countries within the area of the UN Economic and Social Commission for Asia and the Pacific, particularly the countries of South East Asia. The fourth member of the Group is an African geographer from Nigeria, Akin Mabogunje, Head of the Department of Geography of the University of Ibadan; he has been assigned to deal with all African countries not in the Arab League. Riad Tabbarah, from Lebanon and presently Chief of the Population Division of the United Nations Economic Commission for Western Asia; he is responsible for the countries normally included within that Commission's region, and for the North African countries in the Arab League. Finally, there is Raul Urzúa, from Chile, Senior Researcher at the Latin American Demographic Center; he is responsible for Latin America and the Caribbean.

The chairman works in Mexico with the collaboration of staff associate, Joseph Potter, on a reimbursable loan from the Population Council, and who is expected to devote two-thirds of his time to the IRG.

The members are authorized to attend pertinent meetings in their regions, to commission needed papers, and to generally seek professional support for the development of the work entrusted to them in their respective regions. They may also recommend that workshops be held to discuss topics relevant to the terms of reference of the Group's task.

The IRG has held two meetings up to now - the first one in Mexico in early October 1976, as mentioned before, and the second one at Princeton four months later at the end of January of this year.

The third meeting is scheduled to be held in Mexico again in early August, almost a year after the invitation to join the Group was first issued to its members.

At its first meeting, following closely the document approved in the scholars-donors meeting of February 1976, the IRG defined the nature of its task more explicitly, and specified concrete contributions to be made by its members.

The Group agreed that:

1. It would concern itself with issues perceived by policymakers as population-related problems.
2. One of its roles would be to attempt to define scientifically the substance of the concerns of the policymakers, paying particular attention to those areas considered amenable to modification through policy intervention.
3. This latter should be understood as both measures aimed at affecting demographic variables directly, as well as those that attempt to alter such variables through changes in development policies.
4. The review of the state of knowledge and research should be so conducted as to facilitate the detection of strategic research requirements in:
    consequences of population trends;
    determinants of population trends;
    interrelations between demographic, social, and economic policies; and
    implementation and evaluation of population policies.

For the purpose of cross-classifying research requirements in these areas, the Group decided on the complete list of the WPPA demographic variables: population growth, mortality, distribution and family formation, population distribution and internal migration, international migration, and population structure. This decision was guided by a desire to take into account the comprehensive approach of the WPPA which, in turn, may have had a lot to do with the focussing of donor attention on the relationships between population and development.

In that first meeting it was further agreed that, in view of the urgency of population problems and considering that IRG's main concern is with social science research applicable to policy design, the Group will aim to produce recommendations potentially useful for this purpose within the next ten years.

In summary, the first meeting left the members with the immediate task, to be performed personally or by commissioning it to a reputable scholar from their respective regions, of preparing a review of the state of social science knowledge on population and development and critical gaps therein. It should be obvious that the review was to be undertaken against the background laid down in the meeting: policymakers' perceptions of problems as guidance for selection of topics giving preference to problem areas potentially manipulable through policy alternatives that should be possible to spell out and implement on the basis of research within a relatively short period.

The second meeting brought out the weakness of the Group in terms of the model adopted for its organization. It is difficult for persons committed to other pressing responsibilities to comply strictly with schedules of work; postal and even telephone communications between developing countries are not always easy, and it becomes difficult for the chairman, located very far from the different places in which the work is being developed, to give the necessary guidance for achieving coherence between the several components of the task. One alternative would have been for the chairman, with the collaboration of some professional staff at headquarters, to have prepared draft reports for consideration by the members. However, in my personal opinion, this would frustrate completely the purpose for which I understand the Group was set up. The only way to effectively involve policymakers and scholars at the regional level in the discussions that I am confident the IRG's findings will lead to, is by ensuring that what is presented to them be seen as the result of work actually conducted in the region, with due regard to the knowledge accumulated there and for the opinions expressed at different local quarters, and with the participation of native professionals commanding respect in their regions. This in no sense would imply discarding contributions from outside. Because of the preceding, I have preferred to extend, within certain limits of course, the deadlines and to run the risk of receiving contributions of somewhat disparate value and degree of pertinency. It would be the task of the chairman and the Secretariat, in consultation with the corresponding member, and possibly with the collaboration of one or two advisors, to bring all papers to the desired focus. Perhaps this would open the opportunity to overcome another weakness of the group - the absence of a planner among its members. Perhaps I would be able to draw on a person with experience in planning to introduce in the papers some of the relevant issues.

It is not my intention to give the impression that during the second meeting the Group did not show evidence of advance toward completion of its task. Far from it. Members submitted generally encouraging progress reports on the work being undertaken in their regions, and one member presented a complete first draft of the review for his region. Aside from the reviews, the members agreed at this meeting to prepare an additional paper on population policy that would refer to the status of policy adoption and implementation by countries of the region; the status of knowledge regarding political processes related to policy adoption and other elements of the "translation" of research findings into the policy formulation processes. The two papers together will provide the perspective for assessing the adequacy within each region of existing research and training facilities.

The Group agreed in this second meeting on the approximate content of the final report, which of course will be based on the work at present underway, with chapters devoted to major policy issues, state of knowledge, main gaps detected and possible means to fill them. This latter subject should lead to a brief discussion of instrumentalities, such as institutional mechanisms, human resources, and data. Finally, the report would close with an examination of the implications of the IRG findings for the international community and the donors, the policymakers and the researchers.

An important issue for IRG is attaining direct communication with policymakers. Nevertheless, it would have been premature to try to establish contact with them before being able to offer them digestible evidence of work already developed. In the developing countries, governments have already manifested themselves rather clearly through Bucharest, through the post-Bucharest regional consultations, and through some other meetings. It is now up to IRG to find the way of opening channels of communication and establishing a dialogue. Different level policymakers - those actually responsible for direct instrumentation of the policy, those setting the broad lines along which execution should take place, and those adopting the decisions at the highest levels - should probably be approached in different manners. In any case, IRG should endeavour to promote discussion between researchers and policymakers at all levels and in the light of IRG findings identify ways of overcoming the obstacles to greater utilization of existing knowledge and research, and orienting future research to concrete policy problems. As soon as one or more review papers is set in a manner that effectively brings out the policy-relevant issues, it is intended to convene one or two workshops, possibly oriented to the problems of the particular countries in which they would be held.

This is a brief progress report on the work of the IRG and where it is going in the near future. It was with considerable trepidation that I accepted to chair the Group, conscious of the formidable responsibility it implied. While still entertaining hesitations and doubts (that would be very immodest on my part not to have) I am now confident that the Group is moving along the right path, though perhaps more slowly than I would have liked. Needless to say, I would very much appreciate comments about what I have transmitted here today or about any other aspect of the IRG's task. I shall also try to answer whatever questions you might want to raise.

PROGRESS TOWARD NEW CONTRACEPTIVES:
THE PROGRAM OF THE INTERNATIONAL COMMITTEE FOR CONTRACEPTION RESEARCH

Sheldon J. Segal

Introduction

The International Committee for Contraception Research (ICCR) was organized by the Population Council to provide a mechanism for evaluating contraceptive leads that, while scientifically sound, are not given high priority by commercial industry. When the ICCR began its work in 1970, there existed the paradox of health officials throughout the world appealing for methods of fertility regulation better suited to their countries' conditions, while most contraceptive research, initiated by pharmaceutical companies, was aimed at modifying the formula of the existing oral contraceptive ("the pill") as firms vied to gain a share of this lucrative hard currency market.[1] A few companies were attempting to open a completely new market in the chemical abortifacient field. The Ortho Company, Cutter Laboratories, the Wm. S. Merrill Company, and the Upjohn Company had an interest in a series of related compounds that acted as postcoital antifertility agents in the rat.[2] By far the largest research investment in abortifacients was that of Upjohn in prostaglandins. By 1970, with more than ten years of work and a very strong patent position behind the effort, Upjohn had a multimillion dollar investment in prostaglandins for a variety of uses, including abortifacient activity.[3]

As a general rule, scientists in university, hospital, or government research centers were dependent upon corporate policy and company initiatives to obtain experimental drugs and devices for testing. In 1970, there were two agencies that were exceptions; both provided scientists with experimental models of intrauterine devices (IUDs) for clinical evaluation. One was the Population Council, which worked primarily with university researchers and governmental health and family planning programs.[4] The other was the Pathfinder Fund, which selected experimental devices and offered them for testing to private physicians practicing in many countries throughout much of the world.

At that time a number of novel approaches to contraception were evident but either had never been tested adequately or had lost the support of their commercial sponsors; there are many examples. The use of Silastic subdermal implants for long-term contraception had been proposed by the Population Council's laboratory. Preliminary tests by scientists in Brazil, Chile, and India had established the feasibility of this method, but a major development effort was required, and this was beyond the scope of the Council's program. A contraceptive vaginal ring using the Upjohn-patented progestin, medroxyprogesterone acetate had undergone one clinical trial (by Dr. Daniel Mishell, Jr., of the University of Southern California Medical School) sponsored by the Upjohn Company. With no particular interest in testing the possible advantages of other progestins which were owned by other companies, Upjohn carried the program no further at that time. The potential of using the progesterone compounds of "the pill" in a novel manner, as a once-a-month pill, had been shown by Dr. Elof Johansson of the Department of Obstetrics and Gynecology of Uppsala University in Sweden, but the commercial patent-holders did not test the compounds for this use. A clinical trial in Chile by Dr. Anibal Faundes of a once-a-week pill (on the basis of animal work initiated by Gregory Pincus before his death) was sponsored by the French company, Roussel UCLAF, but the company was not prepared to test variations in dosage.

For an objective evaluation of these leads, and many others that were untested although scientifically feasible, a mechanism was required that could work effectively with private industry. One possibility was to bring together in one international institute many of the world's outstanding preclinical and clinical investigators concerned with fertility research. Another idea, discussed in 1969-70, was to use public funds to subsidize the research and development efforts of private industry. The Population Council believed that an entirely different and novel mechanism for international collaboration could get results in the fastest possible time at a fraction of the cost of alternative mechanisms. It was based on the principle of bringing together in a collaborative program the leading experts in the field without moving them from their home institutions and expediting their efforts with efficient and flexible logistical support.

Mechanism

The International Committee for Contraception Research is a mechanism for product development operated and directed by an international team of colleagues. The Committee is composed of nine clinical researchers from Austria, Brazil, Chile, Finland, India, Sweden, and the United States. All have been selected for their expertise in their specialties and for their experience with drug development projects in the field of contraception. Most had never met one another before the formation of the ICCR, but they were drawn together in the venture by their common interest in fertility regulation.

These nine men and women constitute the core of the ICCR program. They make both the technical and policy decisions that guide the product development work. As individual researchers, they also undertake much of the early clinical testing of the potential methods selected for trial and development. Each maintains a full-time staff at his or her home institution to assist in ICCR work.

There is also a full-time headquarters staff for ICCR activities at the Population Council's biomedical research center at the Rockefeller University. There, well-equipped laboratories and animal facilities are maintained to carry out dosage-form development and manufacture, studies of bioavailability, development of analytical methods to analyze dosage forms and blood levels, stability studies, drug toxicity studies, and related developmental activities. This staff includes a biostatistical unit, which plays a key role in the design of clinical protocols, in the preparation of data gathering instruments, and in subsequent data analysis. To augment these capacities, the ICCR provides grants and contracts to other nonprofit research groups and commercial organizations, for clinical and laboratory work tailored to meet specific needs.

Each Committee member, in conjunction with one staff member, takes prime responsibility for all of the development work related to a particular lead. This includes projects carried out in the Committee member's own laboratory and clinic, those carried out by other members of the Committee in their laboratories and clinics, projects assigned to the ICCR laboratories at the Population Council's research center in New York, and those executed under grants and contracts by technical organizations throughout the world. In close collaboration with the ICCR staff, each Committee member maintains a running review of the progress of the potential new method, and the status of each lead is reviewed in detail by the entire Committee and staff at week-long meetings three times a year.

With its network of clinical research centers and laboratories, the supporting staff in New York, and the grant and contract activities, the ICCR has built up broad international capacities across the range of product development functions, dosage formulation and pharmaceutical development, animal toxicology, licensing of patent rights, filings with national drug regulatory agencies, clinical testing for safety and efficacy, packaging and labeling, establishment of manufacturing sources, quality control procedures, and distribution of new methods through public and private sector channels.

Because of its scientific resources, its strong individual commitment and accountability, and its concentrated focus, the ICCR has been able to conduct its mission with unusual flexibility and cost-efficiency. During its first six years of operation, the ICCR has tested clinically more than 300 dosage regimens in 34 countries. Through continuous screening, evaluating, and refining of this product development activity, the vast majority of these regimens were either supplanted by more advanced prototypes, or rejected for lack of promise.

Several new contraceptive methods have emerged from the ICCR work to date, and many additional regimens are currently in some stage of clinical testing.

Methods Carried to Complete Product Development

The ICCR's most advanced work thus far is the successful development of new copper-releasing intrauterine devices, which offer several advantages over existing intrauterine devices. The United States Food and Drug Administration's approval of a New Drug Application for the Copper-T200B intrauterine device followed six years of research and development work. This was the first New Drug Application ever to be sponsored successfully by a noncommercial organization. Three models of the copper-releasing intrauterine devices - the Copper T-200, Copper T-380A, and Copper T-220C - are now available through both commercial sector and public sector sources throughout the world, and well over three million devices are already in use.

Early in the development of the Copper T, the ICCR took steps to ensure that its expenditure of public monies for this purpose would ultimately be reflected in a preferential pricing of the new method for the public sector.[5] As a consequence of these actions, the Copper T-200 device is being purchased by national family planning programs for about $.50 per unit, while a comparable commercial device costs more than seven times as much. The savings to national family planning programs and international assistance agencies have already more than matched the total development costs of this new method, estimated at $2.5 million. In its purchase last year of one million devices for the government of India, the United Nations Fund for Population Activities was able to realize effective savings of more than $3 million.

As a further step, the ICCR is providing assistance to countries that wish to establish local manufacturing capacities to produce their own Copper T devices. Such assistance has been provided to the governments of India and Mexico. India is planning four million Copper T insertions yearly over the next five years and, with UNFPA support and ICCR technical assistance, has established public sector manufacturing facilities to produce all these devices locally.[6] Venezuela has ordered 100,000 devices from the government-sponsored Mexican manufacturing facility.

The following table gives some illustrative performance figures of the three devices.

Performance of Copper-T Intrauterine Devices

Device	First-year pregnancy rate (per 100 insertions)	First-year continuation rate (per 100 insertions)	Expected duration effectiveness
Copper-T 200	2.8	73	4 years
Copper-T 380A	1.1	71	8 years
Copper-T 220C	0.9	73	20 years

A weekly contraceptive pill has also been developed by the ICCR, but, based upon its performance in field studies, it appears to have limited utility for developing country programs. With the collaboration of Roussel UCLAF of Paris, the ICCR undertook trials of the experimental compound, R2323, as a weekly contraceptive. The dose that had been tested by the company (2.5 mg) did not provide sufficient protection against pregnancy. This was partly because the weekly pill-taking schedule allowed no room for error in either missing a dose or taking a pill late. Studies of blood levels in women taking the drug suggested that a higher dose (5 mg) would be more effective and provide a greater margin of safety in case of improper maintenance of the dosage schedule. As shown in the following table, this proved to be the case, but the performance of the method appears to be below minimal requirements to warrant major investment in product development for public sector use. The ICCR studies, however, have prompted a commercial licensee of Roussel UCLAF to undertake a new drug development program for the private market in the United States and other countries.

Weekly Pill
(R2323)

Dose	Number of cycles	1st year pregnancy rate-method failures	Continuation rate
2.5 mg	274	9.1	(study terminated)
5.0 mg	1,944	3.7	58

Methods Ready for Final-Phase Development

A long-acting contraceptive method for women based on subdermal Silastic implants containing a progestin has reached an advanced stage of clinical testing. The ICCR has completed the first stage of a six-country clinical trial of two Silastic implant methods selected from a large variety of regimens evaluated in the ICCR program. Barring unforeseen findings during the next two years, it seems likely that these two versions will become available for large field studies in developing countries.

The results of the clinical trial show that implants can provide long-acting and effective contraception that is acceptable to women. Based on these favorable findings, work is now under way to mechanize and improve the manufacturing process for implants and to develop packaging and informational materials tailored to routine service-delivery needs in family planning clinics. Steps have been taken to ensure the lowest possible cost of the new method for the public sector.

It is not possible to carry out a valid acceptability study of an experimental method of contraception until the characteristics of the method, including effectiveness and other performance criteria, are known. Perhaps the best measure of acceptability is the willingness of users of the experimental method to continue to use it, if given a choice that includes other standard methods. The first results of an ongoing study of acceptability of Silastic implants are now available and are shown in the following table.

Silastic Contraceptive Implants:
Second year reacceptance rates (as of 2/28/77)

Country	Women eligible to reaccept*	Reacceptors	Percent reaccepting
Brazil	22	19	86
Chile	68	62	91
Dominican Republic	24	13	54
Jamaica	17	6	35
Denmark and Finland	51	47	92
Total	182	147	81

*Of the 35 women who discontinued the method, 21 did so for method-related problems and 14 did so for technical reasons such as unavailability of supplies, divorce, etc.

Performance characteristics for the two Silastic implant methods used in this study are shown in the next table. Initially, the study was set up to select between the methods. Now it is evident that each is acceptable and each has special advantages: the 5-year method has a lower pregnancy rate, while the 18-month method has a lower incidence of irregular menstrual bleeding.

Silastic Contraceptive Implants for Women

	Subdermal capsules containing d-norgestrel	Subdermal capsules containing norgestrienone
Pregnancies per 100 users per year	0.4	2.3
Dropouts per 100 users per year due to menstrual bleeding complaints	11.6	6.1
Continuing users per 100 initial users	73	75
Estimated duration of effectiveness in years	5	1.5

While work on subdermal Silastic capsules proceeds, the ICCR is conducting studies to develop longer lasting implants, implants of smaller size, and regimens involving the use of bioerodable implants. Over a dozen of these experimental regimens are being developed and clinically tested. High priority is given to bioerodable implants. The first clinical trials have begun with a version that shows excellent performance characteristics in nonhuman primates.

Two basic variants of a vaginal ring contraceptive method are being developed. One makes use of a "calendar system" in which the device is inserted at the beginning of a woman's menstrual period and left in place during the next three weeks. The ring is then removed for one week; during this time menstrual bleeding occurs.

This "three-week in, one-week out" schedule is repeated sequentially. The other is a "menstruation system" in which the user inserts the ring at the beginning of a menstrual cycle and leaves it in place until menstrual bleeding occurs. She then removes the ring for a period of five to seven days while bleeding takes place, reinserts it, and again leaves it in place until the next appearance of bleeding. Under this schedule of administration, menstrual bleeding may take place as often as monthly or as infrequently as every six months, depending on the particular user.

With the vaginal ring methods studied, nearly 100 percent effectiveness can be anticipated if the method is properly used, because the doses of steroids absorbed daily inhibit ovulation and cause a thickening of the cervical mucus. The major research and development objective of the past few years has been to identify the proper compound and dosage that will achieve this result with an acceptable pattern of menstrual bleeding. Irregular bleeding has now been controlled to an extent sufficient to warrant intensive product development effort for the contraceptive ring method.[7]

Different steroids at varying dosages are being tested under the two schedules. Based on recent favorable findings with rings that release norgestrel, a large multicentered clinical study is being planned by the ICCR to evaluate the effectiveness, side effects, and acceptability of these two methods. While this work is progressing, further improvements in the dosage formulations and manufacturing procedures for the rings are being tested.

Methods in Early or Intermediate Phase of Clinical Trial

The ICCR is testing combinations of drugs that can be used to suppress sperm formation in men. Work on this lead, which has been under way for nearly six years, has involved clinical testing of more than thirty different dosage schedules among hundreds of men. To date the work has identified a combination of two drugs (medroxyprogesterone acetate and testosterone enanthate) that are highly effective in suppressing spermatogenesis in men without apparent side effects.

This finding supports the idea that a male contraceptive method based on sperm suppression through the administration of monthly injections is feasible. However, the most recent findings from these studies indicate that the suppression of sperm production is not complete in all men and that some men experience a return of some sperm production while continuing the injections. The use of higher dosages of the drugs does not appear to overcome this problem. Since no other approach to a contraceptive drug for men appears within reach, it is essential that this advanced work be evaluated fully for its potential and that tests be conducted with compounds that may be more potent inhibitors than those used so far.

Another major ICCR research program at an early phase of clinical trial is the development of a contraceptive vaccine based on the antigenic properties of a portion (beta-subunit) of the pregnancy hormone, human chorionic gonadotropin (hCG), when it is linked to tetanus toxoid antigen. This lead represents a radical departure from other approaches being studied, and it holds the potential to open a new era in contraceptive technology. The ICCR has undertaken its work on this lead in collaboration with the All-India Institute of Medical Sciences (AIIMS) and the government of India.[8] It follows two decades of Council interest and support of work on the immunology of gonadotropins and the chemistry of hCG. A wide array of ICCR development activities and clinical studies was initiated following the original preclinical and clinical observations made by the research team at the AIIMS. The results of these efforts to date have been encouraging and confirmatory of the Indian work. Nineteen subjects have participated in clinical studies in five countries, and in all cases the formation of antibodies against the pregnancy hormone has been observed; the antibodies developed neutralize the biological activity of hCG. Extensive clinical pharmacology studies, including tests for tissue auto-antibody formation, reveal no alteration in organ function or blood chemistry. Regular menstrual cycles have continued in all the volunteers in the program, all of whom have had tubal ligations. A summary of the ICCR clinical experience concerning antibody production is shown in the following table.

hCG Contraceptive Vaccine

Location	Number of subjects	Longest duration since immunization	Presence of antibodies against hCG
India	4	2 years	+ (all subjects)
Finland	6	1 year	+ (all subjects)
Sweden	3	8 months	+ (all subjects)
Chile	3	9 months	+ (all subjects)
Brazil	3	11 months	+ (all subjects)

Concurrently, an animal model using the rhesus monkey has been developed to test effectiveness and key safety issues for mother and fetus (in case of contraceptive failure) prior to the expansion of clinical trials to study contraceptive effectiveness. Work on the contraceptive vaccine is at a relatively early stage of development, but with the current rate of progress and barring the emergence of intractable safety issues, it is possible that a product for field testing will become available in less than five years.

Methods Proven to be Ineffective or Marginal

While the principal ICCR objective is to develop useful new methods from promising leads, it also has sought to rule out leads that do not merit continued development, by gathering sufficient evidence to make an evaluation. This information is disseminated to others working on contraceptive development so that such leads can be dropped from further consideration, or, alternatively, so that future efforts can focus on overcoming the disadvantages.

Several progestational steroids were given to women as a single dose late in the menstrual cycle to induce premature decline of corpus luteum function and thereby initiate menses. Hormone studies revealed that with the most active compound, this monthly pill suppressed progesterone production by the corpus luteum as much as 80 percent. When fertilization occurred, however, the appearance of chorionic gonadotropin overcame the effect of the synthetic compound and full corpus luteum function was restored, so that the pregnancy continued. These "negative" results added considerably to an understanding of the control of corpus luteum function and made it possible to discard several other leads based on partial suppression of the corpus luteum.

A potential precoital pill proved to be ineffective when tested in a small group of women. The compound, a progestational agent, was believed to have a selective effect on the cervical mucus that occurred within hours of oral administration. That the action was extremely variable from woman to woman was established by studies of cervical mucus, without exposing any volunteer to the risk of pregnancy.

Fourteen different preparations of ergotrates with or without sparteine sulfate were tested as potential chemical abortifacients. The clinical-pharmacology and endocrine-profile studies carried out confirmed the earlier observation that partial suppression of corpus luteum function does not terminate an early pregnancy.

In the sterilization field, a surgical procedure that would facilitate reversal of vas deferens closure and various transcervical techniques for female sterilization were tested and subsequently discontinued. The male method failed to show advantage over existing procedures. With the transcervical approach to tubal occlusion, the chemicals used (quinicrine, for example) did not meet the required criteria for effectiveness and safety.

In the course of its activities, the ICCR has published more than 150 research papers, many of which document ICCR findings about the lack of promise of potential leads that have been tested, and this information has provided valuable guidance to other groups.

Lead Development for Supportive Research

While the ICCR is predominantly a clinical testing program, some work is done at the preclinical level to attempt to develop for potential use new information resulting from basic research. For the most part, however, this essential ingredient to any contraceptive development project is achieved by the close coordination between the ICCR and the supportive laboratory programs of the Population Council and of each ICCR member.

Worldwide, perhaps 2,500 scientists are conducting basic research to answer a range of fundamental questions dealing with reproduction. The utilization of these basic research findings is essential if the public sector is to benefit from the broad base of scientific activity in progress. New concepts and modern techniques need to be incorporated in an effective mission-oriented research program. As a program carried out by active scientists who are in constant contact with their colleagues in the broad range of biomedical sciences concerned with reproduction, the ICCR constitutes an effective mechanism for testing and further developing new ideas for fertility regulation that emerge from basic research.

Conclusion

The annual budget of the ICCR over the past five years has averaged \$1.4 million and in 1977 is expected to be \$2.5 million. At this level of funding, the program has completed the development of a contraceptive method now used by millions, brought several other new methods to the point of final development, initiated clinical studies of other leads still in an early development stage, tested and disapproved many other leads, and sustained the flow of new ideas from basic research into the pipeline of applied research. That it enjoys the respect and cooperation of both government officials and scientific colleagues throughout the world facilitates its role in contributing to advances in fertility regulation.

FOOTNOTES

[1] The success of this strategy is evident. Three oral contraceptive products were approved by the United States Food and Drug Administration prior to 1965. In 1968, there were 20 oral contraceptive products marketed in the United States. By 1975, the list had grown to 42. Using the estimates of Dr. Carl Djerassi of Syntex of a cost of $6.8 to $18.3 million for developing a new drug product for female contraception, the 42 new products represent an investment of $285 to $760 million by industry to win a share of a proven market. The actual investment was undoubtedly lower since many of the products are based on the same compounds. But it is evident that this field received a high priority in industrial research and development budgets.

[2] This series of triphenyl-ethylene derivatives was first reported by the Population Council laboratories as having antifertility activity in the rat. Subsequently, the late Dr. Alan Guttmacher tested one of the compounds (MER-25) as a postcoital pill with 30 volunteer couples at Mount Sinai Hospital, New York. Within six months, it was evident that the high level of antifertility effectiveness in rats was not duplicated in human beings, and the study ended. Sometime later, the Ortho compound (ORF 3858) was the subject of an investigational new drug program in the United States and eastern Europe but the trials were discontinued after a brief period.

[3] Preliminary reports from England and Sweden in 1968-70 that naturally occurring prostaglandins could induce labor or abortions under certain circumstances sustained commercial interest in this product's potential. The reports also encouraged the United States Agency for International Development and, later, the World Health Organization to give priority to prostaglandin research in their research programs. In 1975, Upjohn received Food and Drug Administration approval to market a prostaglandin for intraamniotic administration to induce late abortions.

[4] The Population Council's work was the first example of a public-sector development program leading to a new contraceptive method. The loop IUD had already been invented by Dr. Jack Lippes and evaluated by the Council before it was acquired as a product by the Ortho Company. The Council retained rights that exempted public programs from paying commercial prices. It should be noted that the indispensable and historic role in oral contraceptive development of the Worcester Foundation for Experimental Biology and Medicine under the late Gregory Pincus was different. The G. D. Searle Company possessed a patented compound (norethynodrel) which was provided to Pincus for testing in animals and later in people. By reason of its patent rights to the compound tested by Pincus, the commercial sector retained full rights to the final product.

[5] The Copper T-200 has been licensed to companies in the United States, Canada, West Germany, Mexico, Sweden, and Finland, and firms distribute the product in the commercial market of 42 countries on all continents.

[6] Each is bound by the license arrangements to make it available to public sector purchasers at a reduced cost. The Copper T-220C is now available internationally from public sector production in Mexico, and India's factory is preparing to distribute the Copper T-380A both domestically and for export. The Population Council maintains a contract with a facility at Buffalo, New York which serves as a yardstick of actual costs of manufacture. The success of this collaboration between the private and public sectors is the subject of a recent article by S. McLean in the American Bar Association Journal.

[7] With a norgestrel-releasing ring, women using the calendar system had an average of 0.93 days of bleeding per cycle with the ring in place. Using the calendar system with a ring containing a combination of norgestrel and an estrogen, average days of bleeding with the ring in place was reduced significantly, to 0.17 days. With the menstruation system, bleeding with the ring in place is not a problem, but Phase II effectiveness studies are required, since breakthrough ovulations cannot be ruled out during the removal period.

[8] The government of India approved a joint grant proposal to the International Development Research Centre (Canada) from the ICCR and the All-India Institute of Medical Sciences to support the vaccine development program. The 1976 award provides for separate but coordinated grants to the two organizations. The government of India also authorized Professor G.P. Talwar of AIIMS to join the ICCR for the purpose of coordinating the vaccine development program of the two organizations

67

REPRODUCTION RESEARCH AND BIRTH CONTROL TECHNOLOGY: AN INTERNATIONAL COLLABORATIVE EFFORT TO MEET THE NEEDS OF DEVELOPING COUNTRIES - THE WHO PROGRAMME

A. Kessler and C. C. Standley

Needs and Scope of the Programme

The needs for research on the biomedical aspects of population expressed by WHO's member states since the mid-sixties and the strategy for WHO's programme of research unanimously adopted by the Health Assembly were reaffirmed in the Plan of Action for Research in this field formulated at the Bucharest Conference in 1974. WHO's programme, which antedated the Plan of Action by nearly ten years, and the Plan itself place greatest emphasis on research in family planning, but also include research in such areas as infertility, maternal mortality and pregnancy wastage.

The demand for research on fertility regulation arises from the obstacles encountered in family planning programmes. Thus a strategy for research has been designed that is essentially programme-oriented and directed to technologies appropriate to the conditions in developing countries. Technology here refers not only to methods of fertility regulation, but also to the whole of their service provision, principally at the primary health care level.

Based on requests from developing country administrators, the major lines in WHO's programme are:

- assessing the safety, efficacy and acceptability of existing methods of birth control in developing countries;
- devising the best ways of providing methods on a continuing basis in the varying service settings of developing countries;
- improving current methods and developing entirely new modalities.

These lines coincide closely with the concerns expressed at Bucharest as does the other major component of the WHO programme, strengthening the resources for research in this field, particularly

68

in developing countries, and also strengthening on a worldwide basis the disciplines needed for research and development of technology for fertility regulation.

The Programme, in which over 60 countries cooperate, of which 35 are developing countries, is the largest WHO research effort with a budget in 1976 of about $14 million. It is practically entirely supported by voluntary contributions. In 1976, the donors were Canada, Denmark, Finland, India, Mexico, Norway, Sweden, the United Kingdom and the United Nations Fund for Population Activities.

Birth Control Technology

Assessment of Existing Methods

On the whole, careful studies of the safety and effectiveness of methods such as the "pill," intrauterine devices (IUDs), injectables, rhythm methods, surgical methods of sterilization and abortion techniques have only been conducted in Western women. The authorities in developing countries are asking to what extent are the findings applicable to their healthy women, given differences in body size, nutritional habits, and reproductive patterns, and what happens when the pill, the IUD or injectables are provided to malnourished women or those with parasitic infestation. Table I shows the scope of ongoing WHO projects that aim to answer such questions (see following page).

These studies provide results within one to three years that are of immediate applicability to family planning programmes. For example, some authorities in developing countries have hesitated to include the pill in their family planning programmes because of the reports in Western women of increased risk of thromboembolism. WHO studies suggest that, in fact, Asiatic women at least are less prone to this condition. Not all findings are as encouraging as this. IUDs cause increased menstrual blood loss in many women. In developed countries, this does not lead to anaemia because of the high nutritional status, but in populations with malnutrition, WHO studies are showing that this increased blood loss leads to severe iron depletion.

69

Table I: Existing methods: Safety, Effectiveness, Acceptability and Service Delivery

Pill and malnutrition
Pill and parasitic diseases
Pill and cardiovascular diseases
Pill interaction with other drugs
Pill and lactation
Pill assessment: low dose combinations

Monthly injectables
Injectables and malnutrition
Injectables and liver fluke infestation
Injectables and lactation
*Comparison of 2-monthly and 3-monthly injectables, including acceptability

IUDs and anaemia
IUDs inserted immediately post-partum and post-abortion
IUDs and pelvic inflammatory disease
Hormone-loaded IUD
*Midwife insertion of IUDs

Assessment of current methods of periodic abstinence
*Development of teaching methods, periodic abstinence

Assessment of current surgical and fibroscopic methods of sterilization
*Performance of tubectomy by theatre nurses
*Performance of vasectomy by medical students

Short-term sequelae of abortion: in-patient v. out-patient, general v. local anaesthesia, vacuum aspiration v. D&C
Short-term sequelae of abortion: assessment of different techniques and equipment
Long-term sequelae of abortion:
  - effect on later pregnancies
  - infertility

General service studies:
* - supervision of field workers
* - provision of methods in urban and rural settings
* - home visiting

General acceptability studies:
* - factors affecting choice and continuation of use of methods
* - perceptions of menstruation and the use of birth control methods

* Denotes acceptability and service studies

Acceptability and Service Studies

Table I also includes acceptability and service studies on existing methods. For example, of basic importance to the planning of services are the studies on factors that affect choice of method by a population and that determine continuation of use. This information assists decisions on the overall mix of methods to be provided, the personnel and training requirements and the logistics of supply.

The drastic shortage of physicians in developing countries has led to a group of field studies on the improved use of other categories of health personnel to provide family planning methods, for instance on the best ways to train midwives to insert IUDs. A measure for the need for such studies is the fact that the training manuals, checklists and record forms developed for this research have already been requested by family planning authorities.

More innovative studies are being conducted, at the specific request of governments, on performance of female sterilization by theatre nurses and vasectomy by medical students.

Improved and New Methods of Birth Control

Two other approaches also aim to provide family planning services in developing countries with appropriate technology. One seeks to make oral and injectable contraceptives, IUDs, rhythm methods, sterilization and abortion techniques safer, more effective, simpler to use and to provide, and more acceptable. The other thrust is to make available to family planning programmes those new birth control modalities which they feel would considerably extend acceptance and use, e.g. drugs for men, vaccines, post-coital preparations, abortifacient drugs.

These R & D efforts (see Table II) are longer term endeavors than the assessment of existing methods, since the development of birth control methods, even more than of other forms of therapy, involves a lengthy step-by-step demonstration of efficacy and safety. The needed time is usually quoted as being 10-15 years from identification of a compound to marketing of a birth control drug. An acceptability component accompanies these R & D efforts in the WHO Programme.

Table II: WHO Research on Improved and New Methods

*Paper pill

Longer-acting injectables
*Biodegradable implants

Hormone-loaded IUDs
Intra-cervical devices
*Vaginal rings

Kits and devices for rhythm methods

Chemical sterilization

*Drugs for abortion (e.g. prostaglandins, plant products)

Post-coital drugs

*Pills and injectables for men

Vaccines against pregnancy
Vaccines against sperm

*Include acceptability studies

These methods are at different stages of development. Indeed the research on some new methods, for instance prostaglandins for second trimester pregnancy termination, is essentially completed. Other methods, such as vaccines against sperm, are still at an early stage of development; this is when uncertainties are greatest but the Programme has nevertheless included some high-risk lines in areas where it is anticipated that the impact of successful outcome would be very great.

Building Up National Self-reliance for Research

Considerable WHO funds and staff work are going into building up self-reliance in developing countries for research on these problems, through the strengthening of their institutions and through a research training effort that is now the largest in the field. The aim is to provide resources to national family planning programmes to carry out research, adapt technology, interpret advances made elsewhere, and permit the full contribution to the field of scientists from developing countries.

This institution strengthening involves much more than technical and financial inputs by WHO: it is a "learning by doing" process in which the developing country institutions are actively participating in and contributing to the international research effort. The Programme is essentially collaborative in nature. One main mechanism for R & D are the "task forces" of scientists from different institutions, countries and disciplines, that plan and implement research on different approaches to fertility regulation. Another is through networks of WHO Collaborating Centres for research now located in the following twenty-one countries: Argentina, Australia, Brazil, Canada, Chile, Cuba, Egypt, Federal Republic of Germany, Hungary, India (3 centres), Korea, Mexico (2 centres), Nigeria, Pakistan, Philippines, Republic of Singapore, Thailand (2 centres), United Kingdom, United States, Yugoslavia, and Zambia.

The impact of this cooperation is very considerable: the collaboration between developed and developing countries in itself reinforces the expertise of developing countries. It also serves to make scientists in developed countries much more aware of the needs of developing countries and of the problems they encounter. To make available to developing countries the needed technology rapidly and at the lowest cost, the resources of developed countries have indeed had to be mobilized. For some aspects the collaboration of industry has been essential; here, formal arrangements are concluded with the companies to assure that the methods that emerge are made available under the most favourable conditions to the developing countries.

Conclusion

WHO has developed this Programme of research on fertility regulation because member states called for a major research effort to help resolve problems they faced at the country level for which there were no ready answers. It was felt that an investment in research of some magnitude would yield considerable dividends.

It was a sensitive area, and this was one of the reasons why WHO was approached - another main reason was that it seemed the only body capable of mustering the international effort required. WHO hesitated before accepting the challenge, but the approach taken seems successful judging by the number of countries of all political persuasions collaborating in the Programme, the number of countries asking for some or greater involvement in it, and the results emerging from the Programme.

Another reason for WHO's hesitation to set up this research effort was the realization that it was, at a minimum, a ten to twenty year programme for which it would have to rely mainly on extra-budgetary resources. Neither the technological aims of the Programme nor its institution-strengthening objectives in developing countries could be realized more quickly. Fertility regulation methods require continued assessment and adaptation, new methods take 10 to 15 years to develop, and institutions must be supported over a number of years before they can become self-reliant. The Programme's successfully initiated activities so far, to achieve appropriate technology for fertility regulation and strengthen needed research resources in developing countries, imply long-term commitments.

REPRODUCTIVE SCIENCE AND CONTRACEPTIVE DEVELOPMENT: RECOMMENDATIONS TO INTERNATIONAL ASSISTANCE AGENCIES

Oscar Harkavy

A two-year study of reproductive science and contraceptive development has been carried out with the help of more than 160 experts in 26 nations, guided by an international advisory committee representing the scientific community, the pharmaceutical industry, and the major public and private donor agencies. The study, sponsored by the Ford Foundation, in collaboration with the Rockefeller Foundation and the International Development Research Centre, was directed by Professor Roy O. Greep, a distinguished endocrinologist of the Harvard Medical School. Bellagio IV participants will have received the report on the study, _Reproduction and Human Welfare: A Challenge to Research_. This paper will simply highlight findings of this study that are of particular relevance to the work of international assistance agencies.

Recommendations

Twenty recommendations are spelled out in the Report's Summary of Findings and Recommendations. The first three are of overriding importance.

Recommendation 1. A variety of safe and effective methods of fertility regulation beyond those now available is urgently needed by the world's diverse population living under different conditions and circumstances. This requires increased efforts ranging from fundamental research on reproductive processes to targeted activities in contraceptive development.

Recommendation 2. Within this priority effort, greater attention must be given to studies of intermediate and long-term safety of methods yet to be developed.

Recommendation 3. By 1980, allocations for research in the reproductive sciences related to contraceptive development and evaluation by governmental agencies should comprise substantially higher proportions of total expenditures for medical research and development assistance than is presently the case. For an adequate effort on a worldwide basis, $361 million would have been required from all sources as of 1976. This would have been approximately three times the sum committed to the field as of 1974.

Funding of Reproductive Research

Attention must be called to the data on the funding of reproductive science and contraceptive development gathered for the report. Figure 1A, which provides estimated data for 1975 and 1976, updating information appearing in the report, illustrates the unhappy state of funding for this field. Not only have worldwide expenditures for the reproductive sciences and contraceptive development decreased in terms of constant dollars (that is, 1970 dollars), but these expenditures, measured in current dollars, reached a peak in 1974 and have since decreased in 1975 and 1976. When inflation is taken into account, it is clear that the amount of relevant research being supported throughout the world has declined at a time when the promise of major new developments is extremely high and when bringing new products to market requires large expenditures of funds to assure their safety and efficacy.

Reproductive research has received approximately nine percent of funds allocated to population activities by nine international, governmental, and philanthropic agencies that were the principal institutions in the development community supporting population or family planning work in 1974.

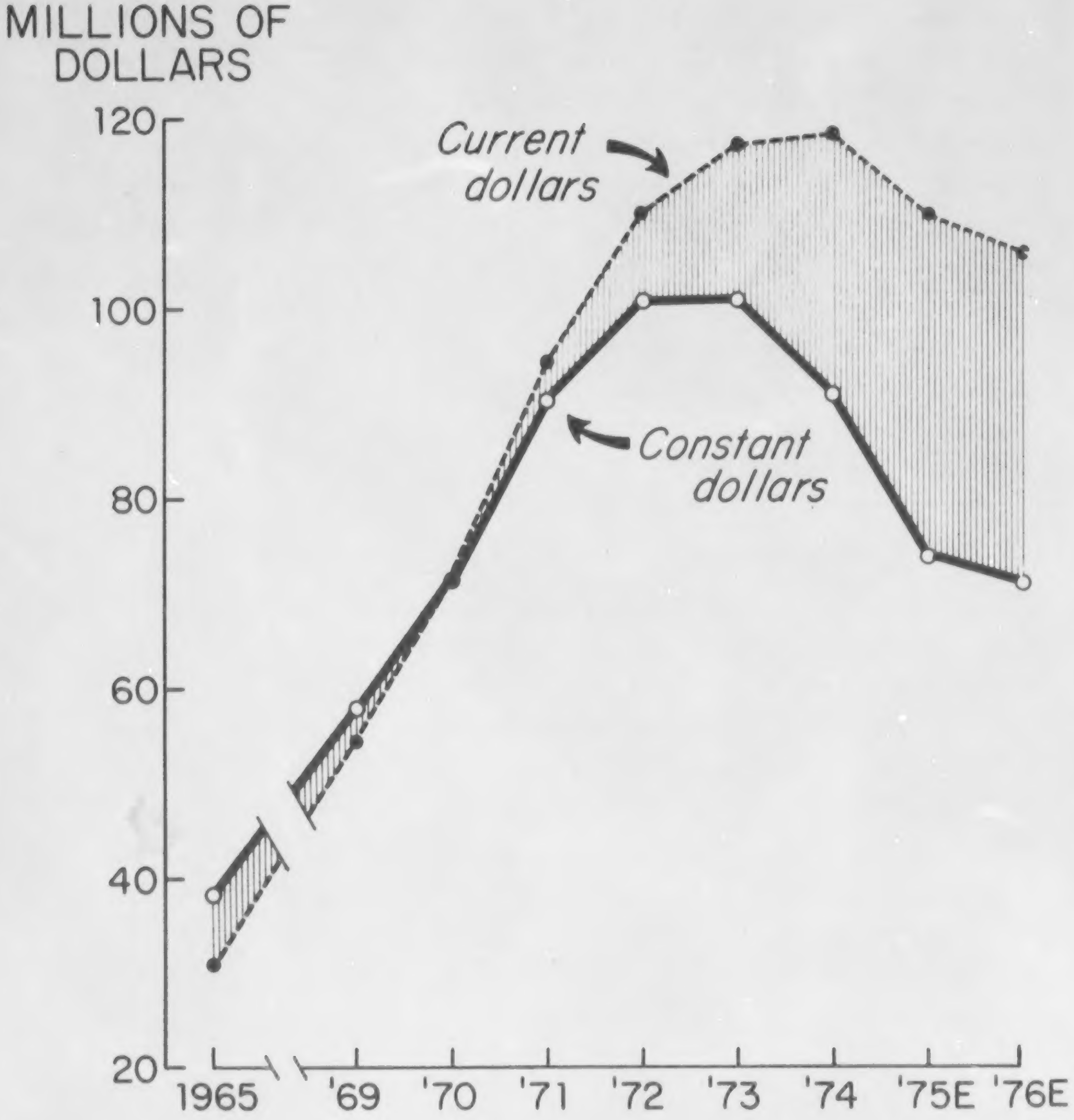
Institutional and Human Resources

Research and training in the reproductive sciences related to contraceptive development is highly decentralized. Fundamental research is primarily a university function, with important work under way at a few free-standing institutes, while more focused applied studies are typically undertaken by research institutes, public sector programs

FIG. 1A

WORLDWIDE EXPENDITURE FOR REPRODUCTIVE RESEARCH

CURRENT vs CONSTANT
U.S. DOLLARS (1970=100)



and the pharmaceutical industry. There are perhaps three thousand investigators in the field throughout the world.

Based on the 1973 records of the principal funding agencies, 176 reproductive research groups could be identified in the United States, including 21 at the "institute" level. In the other industrial nations, there are 162 institutions, with clusters in the United Kingdom, Sweden, France, Germany, and Japan. In developing nations, 81 institutions can be identified. Between 1970 and 1975, more than 3,500 papers were published by developing world investigators in internationally recognized scientific journals, about 7 percent of all published papers in the field; about 40 percent of the developing nation papers were prepared by Indian scientists. In addition, there are excellent fundamental research groups in Mexico, Brazil, Argentina, and Chile and important clinical studies are carried on in clinics and laboratories in other nations.

To ensure the increased participation of scientists in developing nations will require special efforts. While the need for clinical research specific to each nation is obvious, centers of high quality fundamental research presently exist in developing nations and need systematic strengthening.

Contraceptive Development in the Public Sector

The last decade has witnessed the emergence of public sector agencies supported by governmental and/or philanthropic funds with extensive programs in contraceptive development, traditionally the pharmaceutical industry's domain. Pharmaceutical firms have not abandoned the search for new contraceptives, but the resources they allocate to this effort have been limited as a result of increasing costs and risks.

Programs in public sector agencies, now probably the principal agencies seeking to develop improved methods of fertility regulation, often collaborate with private industry in bringing a product to market. Many of these public sector organizations not only provide grant or contract funds to other investigators, but also carry out some of the functions traditionally performed by industry in the development process.

These include the Population Council's International Committee for Contraception Research (ICCR), the World Health Organization's Expanded Programme of Research, Development and Research Training in Human Reproduction, the Center for Population Research of the U.S. National Institute of Child Health and Human Development's Office of Population, and the Indian Council for Medical Research.

Regulation and Ethics of Human Experimentation

Research in this field is affected by trends influencing scientific inquiry generally: increased regulatory requirements for drugs and devices and ethical questions concerning the conduct of research with human subjects. Our assessment indicated that regulation of drug research and development is likely to become more rigorous in all nations, a process that in the long run should prove beneficial to the field as a whole.

The development of new contraceptives will now surely take longer than in the past because both the additional technical requirements of longer studies in animals and humans and the new ethical requirements mean that more time and effort must go into each study. We do not believe these new requirements could, or should, be waived, even though improved fertility regulation methods are urgently needed. We do believe that the principal immediate consequence of these trends is that the search for improved contraceptive methods now depends, even more than in the past, on decisions made and activities undertaken by the noncommercial sector - government and international agencies, and the philanthropic community.

Conference

A special conference on contraceptive development in the public sector was held in London, April 27-29, 1977 to give detailed attention to the role of international assistance agencies in the funding of reproductive science and contraceptive development. Forty-three scientists, scientific administrators, and representatives of multilateral and national overseas assistance agencies and foundations participated in their personal capacities.* The conference had a two-fold purpose: (1) to exchange up-to-date information on the acceptability and use of current contraception in the developing world, questions of contraceptive safety, short- and long-term prospects for new developments in contraception, institutional arrangements for contraceptive development in the public sector and collaboration with industry, and the current state of financing of the field and prospects for the future, and thereby (2) to serve as a specialized, preparatory conference for the June 6-9, 1977 Denmark meeting of heads of international assistance agencies. The London conference was co-sponsored by the Ford and Rockefeller Foundations and the International Development Research Centre.

Rationale for Support of Reproductive Science and Contraceptive Research

The London conference affirmed in strongest terms the world's need to improve contraceptive technology. While the last decade has seen a heartening expansion of family planning programs for the delivery of contraceptives and information on birth control, currently available contraceptive technology remains a weak link in the system. Family planning programs, while extensive, are highly uneven in their effectiveness, particularly in countries where basic health delivery systems are weak or nonexistent. The weaknesses of delivery systems and of motivation to control fertility emphasize the urgency of developing more acceptable and effective contraception.

Conference participants with firsthand knowledge of family planning programs in the developing world gave highest priority to research aimed at improving contraceptive acceptability, adaptation, and use, pointing out the high rates of discontinuation for the pill and the IUD. They expressed the need for a variety of contraceptive methods adapted to differing physiological and cultural needs, noting that it is very difficult to determine on an a priori basis the acceptability or non-acceptability in given populations of specific modes of contraception. Not only is there need for research to develop new contraceptive methods, but also to modify existing technology to improve its acceptability; thus, strong emphasis was placed on adaptive, user-oriented research to be carried out in the developing world, involving not only biomedical investigators but social scientists, epidemiologists, market researchers, and other relevant professionals.

---

*The author of this report has made a conscientious attempt to reflect the major points of view expressed in the London conference, but it should be considered as an informal summary and not an "official" report. There has not been time to present it to participants in the conference for their concurrence or dissent and it remains the author's responsibility.

Conference participants agreed on the high priority need for research on the safety of existing and newly developed contraceptives, a worldwide concern of universal importance to couples of reproductive age and their offspring. Safety studies should be carried out with emphasis on risk-benefit ratios specific to different countries. At the same time it was held important to document the health risk of inadequate fertility control, especially in developing countries where pregnancy carries high morbidity and mortality rates.

The conference affirmed the need to continue and strengthen current efforts to produce new contraceptive products in both the public and private sectors. While some pharmaceutical firms continue their interest in developing new contraceptives, the high financial risks involved are making this effort less attractive to the private sector particularly if the resulting products are to be inexpensive and long-lasting. Thus the need for a strong public sector contraceptive development effort was asserted.

Important advances in contraceptive technology have been achieved and others are in early stages of research. Moreover, significant improvements are now in advanced stages of clinical testing. At the same time, the experts participating in the conference noted that the methods of fertility control likely to be available in the near future will still be subject to important limitations. They urged, therefore, that high prioity be given to fundamental research as the only basis on which materially improved contraception can be expected in the future.

The conference emphasized the need to build capacity in the developing world for research especially on acceptability, safety, and product development, but also where circumstances permit, on fundamental research.

Most governments of developing countries, it was noted, give low priority to research because they are faced by needs to solve immediate and overwhelming problems. This suggests that international assistance agencies should give long-term, sustained attention to research and to capacity building for research.

Institutional Arrangements for Research in Reproduction and Contraceptive Development

The institutional arrangements for research designed to improve methods of fertility control are highly decentralized. Research is carried out by universities and free-standing institutes in the industrial world and increasingly, by governmental units, universities, and institutes in the developing world. At present the largest proportion of this research is undertaken in the industrialized countries. As of 1974 approximately 68 percent of the research dollars were spent in the United States, 27 percent in other industrialized nations, and 5 percent in the developing world. But the proportion spent in the developing world has been gradually increasing. There are active fundamental and applied research groups of high quality in Latin America, India, Thailand, and Egypt, and considerable clinical research and testing activities throughout the world.

Financing for research on reproduction and contraception comes from a variety of sources. The largest single source is the Center for Population Research of the U.S. National Institutes of Health, which provides approximately $42 million of a worldwide effort estimated in 1976 at $110 to 120 million. Medical research councils of other industrial countries provide about $25 million. Growing support of research in the developing world is led by the Indian Council on Medical Research, which now operates at a level of approximately $1 million annually.

Bilateral and multilateral overseas assistance agencies and private foundations contribute to the reproductive sciences and contraceptive development a total of approximately $26 million, about 8 percent of their $314 million commitment to population assistance as of 1976. The principal recipient of support from overseas assistance agencies is the WHO

Expanded Programme in Human Reproduction ($13 million a year) which obtains its funds from Canada, Denmark, Finland, India, Mexico, Norway, Sweden, the United Kingdom, and the UNFPA. The International Committee on Contraception Research ($1.7 million a year) is principally financed by the International Development Research Centre, the Rockefeller and Ford Foundations, as well as by smaller grants from UNFPA and other private foundations. While U.S. AID has supported a variety of research and development activities directly, its principal instrumentalities in the field are the International Fertility Research Program ($2.7 million) and the Program for Applied Research on Fertility Regulation ($1.4 million). The newly established Program for the Introduction and Adaptation of Contraceptive Technology (PIACT) is supported by the Ford and Rockefeller Foundations at a $300,000 annual level.

As yet a number of major bilateral assistance agencies active in support of population work have not provided funds for reproduction research, notably those of Germany, Japan, and the Netherlands. The World Bank provides no funds for reproduction research, while the United Nations Fund for Population Activities directs less than one percent of its total commitments to this effort.

The effectiveness of current organizational arrangements for contraceptive development was examined by the conference. One body of informed opinion was generally satisfied with the operations of the current array of institutions in the field. It appraised as healthy the scientific competition and parallel efforts to develop particular leads to new contraceptives that characterize the present effort to some degree. In the face of extensive uncertainty, contraceptive development strategy is based on the judgment and "taste" of the scientists involved. A centrally controlled single effort in the public sector was considered to be extremely undesirable. Other informed conference participants, on the other hand, suggested that there now is some unnecessary duplication in contraceptive product development, that sharper priorities ought to be set for the entire field of contraceptive research, and that multiple efforts to develop similar methods should be limited. It was urged that the donor agencies periodically examine and evaluate the efficiency and effectiveness of the contraceptive development process and encourage those involved to seek ways to avoid unnecessary duplication while not hampering the freedom to pursue alternative approaches.

All agreed that an effective contraceptive development process requires free and extensive communication and cooperation among the many research and development agencies. It was agreed that mechanisms for such communication are developing in useful ways.

The conference agreed on the importance of collaboration between public sector research agencies and the pharmaceutical industry. Governmental and multilateral agencies that have recently become involved in promoting such collaborative relationships were encouraged to continue exploring appropriate methods for safeguarding the public interest, while maintaining the motivation for private sector participation. These arrangements typically might take the form of agreements which provide that any contraceptive product jointly developed be offered at a low price to national and voluntary family planning programs, while preserving the right of industry to pursue normal pricing and marketing practices in its sales to the private sector. It was noted that capacity for product development and manufacture has begun to emerge in developing countries such as Mexico and India, and the use and further development of such capacity should be facilitated.

The conference addressed difficult ethical issues that arise in contraceptive research and development. There was agreement that human rights must be safeguarded and that contraceptive testing must respect the rules of the country in which it is carried out. It was urged, furthermore, that governments lacking experience in this area be encouraged to develop appropriate standards for protection of human subjects.

The conference agreed that the need for building research capacity in the developing world is only partially being met under existing arrangements. There is a need to train more scientists in the developing world for participation in contraceptive research, and to provide support to the building of institutions that can offer useful careers to the scientists so trained.

The conference also pointed to the need for regular assessment of the progress of reproductive research and contraceptive development, and the effectiveness of the results, with the participation of those taking part in the research and development effort, the donors, and representatives of the users of contraceptive products, especially in the developing world. Periodic meetings involving these groups should be held under the auspices of the principal interested parties.

Financial Requirements

The Greep review estimated an optimum effort as of 1976 at $360 million, about three times the worldwide expenditures for this work in 1974. The London conference recognized that the optimum level of funding as calculated in the Greep review is based on scientific judgment, and admits of differences of opinion. There was general agreement, however, that an adequate worldwide effort should be twice to three times the current level of expenditures. It was noted, for example, that a number of current leads will be ready for large-scale clinical testing in the near future, and will require funding well beyond the current budgets of the agencies that have developed them.

The conference agreed that institutional capacity currently devoted to research on reproduction and contraception can expand rapidly if additional funds are forthcoming. Realistically, any additional sums for this effort would be made available on a phased basis, allowing time for capacity build-up. Clear evidence of the existence of unused research capacity was provided by the director of the National Institutes of Health's Center for Population Research who reported that, of those applications for research support received by the Center that are approved as being scientifically meritorious for funding (about half of the applications), only 30 percent are actually funded: 70 percent fall in the "approved but unfunded" category for lack of sufficient funds in the Center's budget.

Against this need for additional funding, the conference noted the serious fact that funds for research on reproduction and contraception have not risen in recent years. The conference discussed several alternative means for responding to the needs.

There was a broad consensus that medical research councils in industrial countries should be encouraged to provide support for research on reproduction and contraception on a scale considerably larger than at the present.

Research on reproduction should be increased because current contraceptives are far from ideal for users in those countries due to their medical side-effects, and because the scientific community in advanced countries in an interdependent world should contribute to the solution of broad international problems. The conference urged special attention to research on male reproduction to provide the basis for badly needed contraceptives for use by men. It was suggested that assistance agencies interested in the population field might encourage their opposite numbers in national health research agencies in industrial nations to increase their allocations to reproduction research for the benefit of their own citizens as well as those of the developing world.

There was also a broad consensus that national and international assistance agencies should be encouraged to provide additional support for research on reproduction and contraception as the total funds they allocate to population activities rises. In contrast to the situation in other areas of grave concern to the developing world, such as agricultural production, in which funds for research are rising rapidly and can be expected to expand in the future, funds for research in reproduction and contraception provided by assistance agencies have leveled off in recent years. There was not consensus, however, on whether the proportion of funds allocated to such research (about 8 percent of total population assistance funds in 1976) is too small or is satisfactory. (No participant argued that the present proportion should be reduced.) At present there are marked differences in the proportion of population assistance which is devoted to research on reproduction and contraception by the several agencies (see attached table 1). No one suggested that a uniform percentage would be desirable, but it was suggested that assistance agencies which contribute only a small percentage of their population assistance funds to contraception research might consider raising the percentage, and that assistance agencies which have not contributed to such research thus far might give consideration to doing so.

There was divergence of opinion with respect to the responsibility of overseas assistance agencies for support of fundamental research in reproduction. One group held that these agencies should direct their funds primarily to activities with relatively short-term payoff: contraceptive product adaptation and development, safety studies, and studies to improve delivery systems. Others held, however, that there should also be a substantial increase in the funds devoted to fundamental research by overseas assistance agencies, with special emphasis on enlarging and employing research capacity in developing countries for fundamental as well as applied research.

A related issue has also been the subject of debate among overseas assistance agencies contributing to the contraceptive development process: should these agencies support contraception research in industrial countries as well as in the developing world? It was forcefully argued at the conference that it is appropriate for assistance agency funds to be used to support contraceptive research in industrial countries in order to achieve improved technology for developing countries as quickly as possible at the lowest possible cost. It was pointed out that few other agencies in industrial countries currently concern themselves with applied research on contraceptives (as contrasted with fundamental research on human reproduction). Only the National Institutes of Health, among industrial world medical research councils, supports contraceptive development. It was noted too that joint collaboration by scientists from industrial and developing countries has valuable effects in building research capacity in developing countries.

Finally, there was consensus that governments of developing countries should be encouraged to give higher priority to research, especially to research on contraceptive acceptability and use. It was pointed out that if governments of the developing world give low priority to research, that will affect both the use of their own funds and those of bilateral aid agencies, which make funds available in accordance with host country priorities. It was suggested, therefore, that host country governments should be encouraged by funding agencies to recognize the importance of research and request that an increasing proportion of bilateral

86

assistance funds be provided for enlargement of research capacity in the developing world.

New Funding Mechanisms?

Some participants suggested the need for new funding mechanisms if substantially increased financial support is to be provided to this field, but most participants in the conference were reluctant to recommend new mechanisms, or if such be required, how they should be constructed. It was hoped that the heads of assistance agencies would give attention to this issue in their Denmark meeting.

Table 1: Commitments For Population Assistance And Reproductive Research By Ten International Assistance Agencies

(1970 - 1976) (U.S. $ in millions)

AGENCY	1970	1971	1972	1973	1974	1975	1976
CIDA							
Population Assistance	1.7	2.9	3.1	5.1	6.6	8.9	13.4
Reproductive Research	-	-	-	1.0	1.3	1.5	1.5
Percent	-	-	-	20%	20%	17%	11%
DANIDA							
Population Assistance	.7	1.8	2.2	2.1	4.4	3.8	4.8
Reproductive Research	-	-	.5	.3	.5	.6	.8
Percent	-	-	23%	14%	11%	15%	20%
FIN-AID							
Population Assistance	.1	.3	.3	.3	.6	.6	.5
Reproductive Research	-	-	-	-	.1	.1	.1
Percent	-	-	-	-	17%	17%	20%
FORD FOUNDATION							
Population Assistance	14.3	17.3	14.6	13.0	13.7	11.2	10.7
Reproductive Research	6.9	10.3	7.4	7.4	6.5	3.9	6.4
Percent	48%	60%	51%	57%	47%	35%	60%
IDRC							
Population Assistance	.1	.3	.5	1.2	1.8	2.2	1.8
Reproductive Research	.1	.2	.3	.6	.9	1.5	1.7
Percent	100%	67%	60%	50%	50%	68%	94%
NORAD							
Population Assistance	1.0	3.9	5.5	12.5	12.7	15.3	23.1
Reproductive Research	-	-	.6	.8	1.3	1.6	1.7
Percent	-	-	11%	6%	10%	11%	7%
ROCKEFELLER FOUNDATION							
Population Assistance	16.3	6.3	6.4	6.6	5.3	5.3	4.4
Reproductive Research	13.6	2.7	1.9	3.0	2.1	2.0	1.0
Percent	83%	43%	30%	46%	40%	38%	23%
SWEDEN							
Population Assistance	6.5	9.2	12.7	13.7	18.3	29.4	32.0
Reproductive Research	.1	-	3.0	4.0	5.0	6.4	6.8
Percent	2%	-	23%	29%	27%	22%	21%
UNFPA							
Population Assistance			50.1*	50.0	68.4	85.7	81.0
Reproductive Research			1.0*	1.0	1.0	1.0	0.6
Percent			1%*	<1%	1%	<1%	<1%
USAID							
Population Assistance	74.6	95.9	123.3	125.6	112.5	110.0	134.5
Reproductive Research	7.4	5.9	6.6	5.2	2.2	3.4	5.2
Percent	10%	6%	5%	4%	2%	3%	4%
TOTALS**							
Population Assistance	115.3	137.9	168.6	202.5	212.1	236.8	236.2
Reproductive Research	28.1	19.1	21.3	23.3	20.9	22.0	25.8
Percent	24%	14%	13%	11%	10%	9%	11%

* Cumulative figures 1969-1972
**Adjusted to eliminate double counting

RECENT TRENDS IN INTERNATIONAL POPULATION ASSISTANCE*

Halvor Gille

Introduction

The history of international population assistance is brief, but spectacular. As recently as ten to fifteen years ago, there was little consensus among governments as to the need for assistance to the Third World except in the fields of demography and statistics.[1] On the contrary, the forces opposing assistance to such activities as family planning and population policy on religious, cultural, or political grounds were still generally dominant. Within many developed countries the promotion of family planning was still, to a large extent, seen as the exclusive concern of voluntary endeavours, supported by private philanthropy. Today, technical co-operation and financial assistance for a wide spectrum of population activities in developing countries are fully recognized as the legitimate concern of, and high priority for, governments and the international community.

In the early 1950s, the United Nations began to assist developing countries with census-taking, training in demography and the preparation of studies of the relationships between population trends and social and economic factors as well as with some action oriented research activities. In 1952, two non-governmental agencies concerned with assistance to population were established - the International Planned Parenthood Federation (IPPF) and the Population Council. The Ford and Rockefeller Foundations also began to assist population-related activities. Together these four non-governmental agencies were the main sources of assistance for population and related activities until the late 1960s when governmental resources became available on a large scale.

The first government to give assistance for family planning to a developing country was Sweden in 1958. This was in support of an experimental programme in Sri Lanka, and was followed by similar assistance to

*The views expressed in this paper are those of the author and do not necessarily reflect the policies or directions of the United Nations or any of it member states.

89

the government of Pakistan in 1961. The United Kingdom initiated its bilateral population assistance programme on a modest scale in 1964. The U.S. government began to include population activities in its development assistance in 1965. In the early 1970s a number of governments followed the lead provided by Sweden, the United Kingdom and the United States. These included Canada, Denmark, the Federal Republic of Germany, Japan, the Netherlands and Norway.

The barriers which, to a large extent, had handicapped the United Nations system in responding directly to the needs of developing countries for assistance in the fields of population, particularly in family planning, began to lift around the mid 1960s. A consensus was reached in the General Assembly in 1966 concerning the provision of population assistance, from governments upon request, in the areas of training, research, information, and advisory services. In response, the following year, the Secretary-General established a Trust Fund for Population Activities - later renamed the United Nations Fund for Population Activities (UNFPA) - which rapidly grew into a major source of international population assistance, both in terms of financial resources as well as programme development. In the meantime, a number of United Nations Specialized Agencies and UNICEF broadened their mandates to include those aspects of population and family planning falling within their areas of competence. In 1968, the World Bank* began to take into consideration the need of developing countries for assistance to family planning programmes and related activities and made its first loan in this area to Jamaica in 1970.

One of the most important events in the history of international population assistance occurred in 1974 when the World Population Conference was held in Bucharest. A World Population Plan of Action was adopted at the conference by consensus of 135 states inter alia calling upon developed countries as well as other countries to increase their assistance to developing countries: "In view of the magnitude of the problems and the consequent national requirements for funds ... considerable expansion of international assistance in the population field is required for the proper implementation of this Plan of Action."[2]

*The International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA).

To what extent has this call been heard? Have the main features of international population assistance changed since the Bucharest Conference? What is the outlook for the future role of such assistance?

Current Levels of Population Assistance

Total international assistance for population activities amounted to only about $2 million in 1960 and $18 million in 1965, but it increased rapidly to $125 million in 1970 and to well over $300 million by 1976 or an estimated net amount, excluding double counting, of $314 million (see Table I in the Annex).*

This dramatic increase in population assistance was a clear indication of the growing commitments of governments and international organizations concerned to collaborate in, and contribute to, tackling the urgent population problems of the developing world. It is important to note, however, that the rapid growth in resources made available for international assistance has not been maintained in recent years. A peak was reached in 1974 when the annual growth in resources for population assistance reached an all time high level of over $50 million. The timing of this peak could be interpreted as a response to the spirit of the World Population Year and Conference, but is more likely a result of the devaluation of the U.S. dollar which automatically increased the U.S. dollar equivalent of the amounts pledged by many donors in their own currency.

In the following years the average rate of growth in resources fell well below the level reached earlier in the 1970s. The percentage annual increase was only 11 and 8 percent in 1975 and 1976 respectively, as compared with 20 percent on the average in the years 1970-74. In view of the substantial inflationary trends worldwide and the devaluation of the U.S. dollar, the growth in international population assistance has, to a great extent if not entirely, been offset by the decline in purchasing power. Measured in constant U.S. dollars (consumer price index),

*Differences in definition of population activities and difficulties in identifying population components in multi-purpose or integrated development programmes make it necessary to exercise some caution in interpretation of international statistics on population assistance.

the annual increase since 1974 has been limited to 1 to 2 percent. Therefore, the level of resources transferred for population activities for the benefit of the developing countries has hardly increased since the World Population Year and Conference (Figure 1).

It seems quite clear that the magnitude of population assistance has not kept pace with overall development assistance since the World Population Conference (Table 2). In 1974, assistance in the field of population amounted to 2.3 percent of total development assistance, but has since declined to 2.0 percent or slightly less.

The main factor in the slowing down of the trend in resources for international population assistance was that the largest donor, the United States, did not continue to make substantial increases in its population assistance as it did in the late 1960s and early 1970s, but actually reduced its annual contributions from year to year in the period 1972 through 1975. An upward trend appears to have begun in 1976 (an amount of $146 million is estimated for 1977 and around $160 or higher for 1978, see Figure 2) but the amount of assistance for that year was still below the 1972 level. Although a number of other donor governments of developed countries at the same time showed a growing recognition of the importance of population assistance by increasing substantially their contributions, these increases were not large enough to maintain the overall growth rate of resources available for population assistance.

The dominating position of the United States in the donor community has recently been considerably reduced. Before 1974, three-quarters or more of all government resources for population assistance and well over half of all funds came from the United States. In 1976, total contributions from other governments exceeded that of the United States, but the latter was still the largest donor providing about 47 percent of government contributions and around one-third of total population assistance (Figure 2).

Sources of Population Assistance

Although over eighty governments have, at one time or another, contributed to international population assistance, the major share comes

Figure 1. Total International Population Assistance
(excluding double counting) 1971-1977

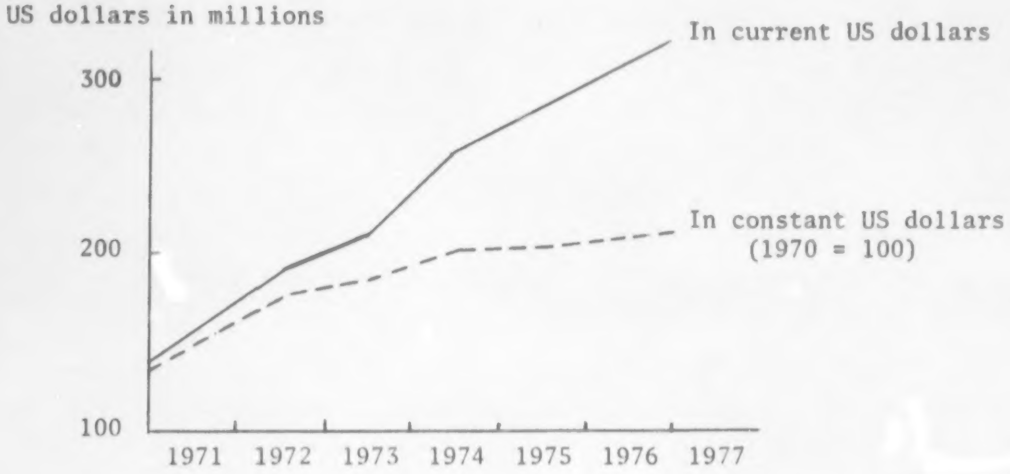


Figure 2. Government Donors

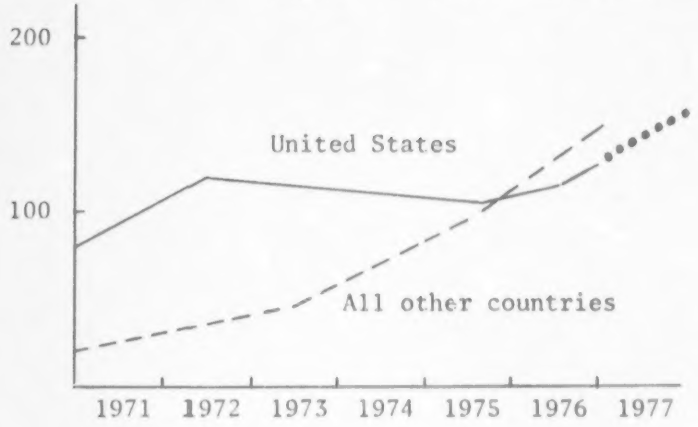
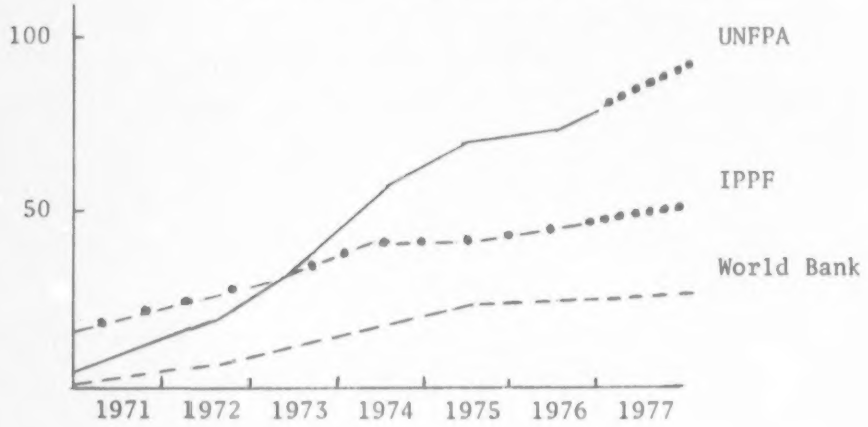


Figure 3. Major Multilateral Donors



from less than a dozen countries. The largest contributor, the United States, spent around $119 million on population assistance in 1976 or 2.6 percent of its total development assistance. Around one-fifth (19 percent) was channelled through private and voluntary international organizations based in the United States; nearly one-quarter (23 percent) went to UNFPA and IPPF; about one-fifth (21 percent) was grants to universities and other governmental and non-governmental institutions in the United States for research and training related to population issues of developing countries, and the remainder, over one-third (37 percent) provided direct bilateral support to population and family planning projects in developing countries.

Sweden and Norway are the two largest donor governments after the United States. In 1976, the total Swedish financial contribution reached a level of around $28 million amounting to over 7 percent of its total development assistance. Norway, which has sharply increased its population assistance since 1974 by nearly tripling it, reached nearly the same level as Sweden, namely $27 million in 1976, representing 9.5 percent of its total development assistance programme - the highest proportion of any donor country. (The Norwegian law on development assistance stipulates that 10 percent of all assistance should be for population.) Finland and Denmark also gave comparatively high priority to population assistance with contributions in 1975 of $2 and $4 million respectively, or over 4 and 2 percent respectively of their total assistance programme. Other major contributors were Japan, with about $13 million, Canada around $10 million, the Netherlands and the United Kingdom with around $8 million - but in all these countries, population assistance constituted merely 1 percent or less of total official development assistance.

A significant development has been the interest shown by a number of Arab governments, particularly of oil-exporting countries in contributing to international population assistance. In 1976, Arab governments, which previously only had made minor contributions, granted around $10 million,an amount equivalent to their contributions to UNDP in that year for development assistance in general.

A number of donors provide bilateral population assistance amounting to about 28 percent of total governmental population assistance (1975), but only in three countries is the population component of the total bilateral governmental assistance programme of major significance, namely in Norway, Sweden and the United States where it constituted around 4 to 5 percent of the total.

Around 62 percent of total population assistance provided by governments is channelled through multilateral organizations - about 35 percent to inter-governmental bodies and 27 percent to international non-governmental organizations. (About 11 percent of governments' population assistance is spent in institutions in the donor countries themselves.) A number of governments utilize multilateral channels for most of their support of population activities: Belgium, Canada, Denmark, the Federal Republic of Germany, Japan, New Zealand and Norway. The Netherlands has phased out all bilateral population programmes and concentrates its resources entirely on multilateral aid.

Multilateral population programmes have grown markedly. Until the mid-1960s, the role of the organizations within the United Nations system was restricted, not merely by limited mandates in the population fields and lack of funds, but also by the fact that few governments had yet formulated national population policies or foreign aid policies on population. Around 4 percent of total government development assistance provided to multilateral programmes is for population activities. Most of the resources available for population activities undertaken by the United Nations and its Specialized Agencies (excluding UNFPA whose resources are entirely from voluntary government contributions) are provided by governments as voluntary extra-budgetary contributions and only about one-sixth is provided by assessed contributions to their regular budgets from member states.

Before the World Population Conference, UNFPA had already emerged as the largest multilateral source of population assistance. Since 1974 the Fund has continued to grow rapidly, at twice the rate of increase in population assistance in general.[3] Today, it is by far the largest source of direct assistance for population activities in developing countries (Figure 3).[4]

A number of non-governmental organizations have played an important pioneering role in the support of population activities. The four largest in this regard are the International Planned Parenthood Federation (IPPF), the Population Council and the Ford and Rockefeller Foundations. A number of other smaller private organizations also contribute. Some of them function exclusively in the population fields; others support population activities within a broad range of purposes and programmes. All these organizations provide a channel for private financial contributions, though many also draw, to some extent, on governmental or multilateral funds, and some rely on the contributions of volunteers and part-time workers.

Involvement in assistance has also spread to professional organizations in the population field, such as the International Union for the Scientific Study of Population, the International Confederation of Midwives and the International Association of Schools for Social Work. Other organizations are primarily concerned with assisting special target groups mainly through education, information, and advisory services on population questions of concern to their affiliates and members.

Mass organizations, such as trade unions, co-operatives, youth and women's organizations, and other key institutional forces with international responsibilities are also beginning to support the development of population policies and programmes, although the primary focus of their activities may not be on population issues.

Furthermore, a number of universities and other educational institutions, mostly American but also some European ones, conduct training programmes specifically oriented towards the needs of developing countries, as well as support or carry out research activities relevant to selected population issues in developing countries.

Types and Areas of Assistance

Almost all donors make their contributions to population assistance in grants, but a few governments (Canada, Denmark, Finland, the Federal Republic of Germany, and the United States) also make loans available.

Inter-governmental and non-governmental organizations all provide grants except the World Bank, which only gives loans or credit. All donors make contributions in cash, but some also provide grants in kind mainly equipment and contraceptive supplies (Australia, Denmark, Finland, the Federal Republic of Germany, Japan, Sweden, and the United States).

In 1975, about 48 percent of the total resources available for population assistance supported family planning programmes. However, a substantial part of the resources devoted to "multisector activities" which amounted to around 20 percent of all resources and, to some extent, some of the activities in the fields of communication and education, supported family planning activities directly or indirectly. Thus, the share of total resources supporting family planning was undoubtedly well over 50 percent. Around 15 percent of total resources was devoted to statistical and demographic activities and a smaller share, just under 10 percent,to biomedical research including contraceptive development.

From a geographical point of view, the largest share of support, over 40 percent, was devoted to interregional and global activities, many of them carried out in developed countries. As for the remainder, the largest share went to the region of Asia and the Pacific, namely around 30 percent, followed by Africa with 14 percent, Latin America 10 percent and the Mediterranean and the Middle East 5 percent.

A comparison between the assistance provided in 1975 by the three largest donors illustrates notable differences in programmatic emphasis. The United States spent over 75 percent of its resources in supporting family planning programmes, while the comparable figure for Sweden was about 50 percent and for the UNFPA slightly less. On the other hand, about 19 percent of UNFPA resources supported basic data collection, the comparable figure for the United States was only around 9 percent and for Sweden, negligible. Both the United States and the UNFPA devoted around 10 percent of their population assistance to the field of population dynamics. Biomedical research, including contraceptive development, received over 40 percent of Sweden's population assistance, about 5 percent of the United States' population assistance and only less than 1 percent of UNFPA resources. From a geographical point of view, the United States spent around 67 percent of its resources on interregional and global projects, while for Sweden the share was just under 50 percent and for the UNFPA almost 24 percent. As for assistance to activities at the country level, all three donors spent the largest shares in Asia and the Pacific; this is particularly true of Sweden and the United States, while UNFPA had a more even distribution among regions.

The Need for, and Impact of, International Population Assistance

It is a difficult, if not an impossible task, to estimate the future needs for international population assistance. Much depends upon the criteria to be applied with regard to the types of population activities which are required, the extent to which support from external sources is needed, the availability of local resources and the absorptive capacity of the developing countries.

The UNFPA has attempted to make estimates of the costs of developing comprehensive population programmes to meet various targets or goals such as: to provide information and services on family planning for the entire population in the developing countries; to conduct a complete population census in all countries at least every ten years; to establish vital statistics registration systems with a coverage of at least 90 percent; to provide population education in and out of schools; to train personnel required for population programmes; and to support research required for planning and implementing effective population programmes, including operational research and development of improved contraceptive techniques.

An approximate total annual cost for all relevant population activities is estimated at 1.50 per capita or $2,900 million (1976 prices) for the developing world as a whole. The provision of family planning and maternal and child health services according to established minimum requirements accounts for the major share estimated at $0.84 per capita.

Although no accurate estimates can be made of the need for population programmes and the estimates provided here may not take fully into account several concomitant needs in the economic and social fields, it seems fairly clear that the estimated total of around $300 million available for population assistance from international sources amounts to a small proportion, probably only around 10 percent of total estimated needs for external and internal resources for population activities.

In financial terms, international assistance defrays only a small portion of the actual costs of the population activities undertaken in the developing world. While it is recognized that such assistance cannot be, and should never be, more than a marginal addition to the development efforts of recipient countries, there is no question, however, that the role and significance of international population assistance go far beyond the often comparatively modest financial inputs. It constitutes, in many cases, an essential element in promoting national efforts and enlisting local resources. In many instances, the activities supported would probably not have taken place at all without the interest and contributions of donor governments and agencies. Very often, international assistance provides the important spark needed to overcome reluctance at the local level to expend the necessary financial, human, and material resources for worthwhile activities. Sometimes the will and the necessary local sources may be there, but crucial inputs of equipment and supplies cannot be obtained due to foreign exchange difficulties unless international assistance is made available. The African Census Programme is a case in point, under which a number of developing countries for the first time are involved in taking a population census.

At the same time, the role of international assistance should not be exaggerated to imply that without it major results cannot be accomplished in tackling population problems in the developing world. The People's Republic of China is an excellent example, where the effective delivery of family planning services at all levels, measures dealing with internal population distribution problems, and contraceptive research have been undertaken successfully without any assistance from abroad. Still, the majority of developing countries need and want international assistance to expedite the process of dealing with their population problems.

One of the most significant accomplishments of population assistance is probably the contribution it has made to promoting awareness worldwide and in individual countries of population problems and issues, their implications and the need for policies and programmes to deal with them. It is not possible, in general, to demonstrate definite effects upon population trends, and in any case, results cannot be expected in the short span of a few years. Support provided for the training of personnel, for research and evaluation, for institution building, and for related education and communication activities often has important multiplier effects and long-term benefits which are difficult to measure in quantitative terms.

Priorities in Future Programmes

More and more attention is being devoted to setting priorities in assistance to population programmes for two main reasons. On the one hand, increasing awareness of the impact of population factors on development and the adoption of population policies by more and more governments have led to rapid growth in the demand from developing countries for such assistance. On the other hand, developments at the World Population Conference have led many donors to review and reassess their development co-operation policies, with particular regard to population.

Reviews have been undertaken or are in progress in Canada, Sweden, the United Kingdom, the United States, UNFPA, the World Bank and IPPF, often resulting in new strategies or policies for population assistance. Various concepts of setting priorities for allocation of resources have emerged or have been sharpened. Most donors apply more than one criteria for setting priorities. UNFPA has developed a system for setting priorities based on economic and demographic data reflecting needs.

The following resume of criteria for priority setting is not intended to give complete coverage for all donors but reflects mainly new strategies for population assistance resulting from recent reviews, revision, or reaffirmation of policies.

Priority Countries

Some donors intend to concentrate their resources in, or give special attention to, the needs of certain countries.

100

In the case of several bilateral programmes, the political situation of the recipient countries or special geographical, historical, cultural, or trade considerations play an important role (Australia, Canada, Denmark, Japan, New Zealand, Sweden, the United States).

Some donors are particularly interested in assisting the poorest of the developing countries based upon criteria on estimated per capita income (UNFPA, Canada, the United Kingdom) or the extent to which they are seriously affected by balance-of-payments problems (New Zealand, the United Kingdom).

Sometimes demographic criteria are taken into account in identifying countries with the most urgent need for population programmes (Canada considering birth rate, death rate, infant mortality, current and future potential population growth; the United States concentrating on countries with large populations contributing most to world population growth and where prospects for reducing fertility are best; UNFPA using rate of population growth, fertility, infant mortality, and agricultural population density; and the World Bank taking into account population size, growth rate, population density, government's policy commitment to reduce fertility, and prospective demographic impact).

Priority Objectives

Most donors are giving increasing attention to support for population activities as an integral part of development such as rural development, family health, social welfare, participation of women in development, etc. (Finland, Federal Republic of Germany, Japan, Norway, Sweden, the United Kingdom, the United States, UNFPA, ILO, FAO, WHO, the World Bank, Ford Foundation, and the Population Council). Some support population components in such programs (UNFPA, the Population Council).

Several donors are giving priority attention to promoting activities at the local level through community or family based programmes (the United States, UNICEF, the World Bank, IPPF). Priority is given by some donors to assisting population activities for the benefit of poverty-stricken and other disadvantaged population groups (UNFPA, ILO).

Attempts are being made to determine recipient countries' basic needs in population and related fields (the United States, UNFPA, UNICEF, ILO, WHO).

Priority Areas of Assistance

Most donors of population assistance will continue giving high priority to support for family planning activities designed to attain fertility reduction, health, social welfare, or other socio-economic development objectives. Contraceptive supplies are provided by a number of donors (Japan, Sweden, the United States, UNFPA, IPPF). Only certain donors provide financial or technical assistance for abortion and sterilization programmes (Sweden, the United States (sterilization only), UNFPA, the World Bank, WHO, IPPF, and a few other non-governmental organizations). Injectables are available only from a few donors (the United Kingdom, UNFPA, WHO, the Population Council).

Most donors are giving high priority to the training of local personnel for population programmes. Many are also giving special attention to research such as in human reproduction and contraceptive development (Canada, Sweden, WHO, Ford Foundation, the Population Council, Rockefeller Foundation); to operational research (the United States, UNFPA, the World Bank); and to demographic and social science research (United Nations, UNFPA, the World Bank, Ford Foundation, the Population Council).

Prospects for the Future

It is, of course, difficult to make a long-term prediction of the future resource situation for international population assistance. Very much depends upon the prospects for overall development assistance. Several donors have reached, or will soon reach, the overall goal for development assistance in the Second Development Decade of one percent of the gross national product and their population assistance may not increase substantially beyond the equivalent of increases in its national income.

On a short-term basis, however, prospects seem quite good for a substantial increase in resources; the United States is likely to

102

increase its population assistance from $119 million in 1976 to $146 million in 1977 and around $160 million or higher in 1978, which is an average annual increase of nearly 20 percent. Japan may increase its assistance in 1977 by a similar percentage and UNFPA expects to operate in 1977 at an expenditure level around 15 percent higher than that in 1976. If contributions from other governments than the United States should continue to increase at the same level as in the past three years, total population assistance may reach about $400 million by 1978.

It seems too early to assess the impact of the World Population Conference and the World Population Plan of Action upon population assistance. Several major donors have reviewed and revised their policies mainly to broaden the approach to deal with population issues. Many donors seem still to stress fertility control as the major objective of their population assistance, although the World Population Plan of Action gives considerable emphasis to other areas as well. Problems of urbanization and spatial distribution, according to a United Nations inquiry, are those population problems which most governments are concerned with, but very limited population assistance is provided in these areas. There has not been any discernible increase in the attention given to biomedical research, including contraceptive development despite the stress on it in the Plan of Action.

Donor governments and organizations have become more concerned with the views, needs and policies of recipient countries. However, a considerable part of international population assistance is still supporting research, training and other activities located in the donor countries themselves. Further attention should be given to building up the technological infrastructure in developing countries in some cases on a subregional or regional basis. More use should be made of the local expertise and production facilities in the recipient countries rather than sending advisers, equipment, and supplies from the industrialized world. The main emphasis should be on building up the self-reliance of developing countries.

At the moment, international population assistance finds itself in a dilemmatic situation with forces pulling in opposite directions.

With the greater availability of data and trained personnel and the establishment of population policies by more and more governments, absorptive capacity for population assistance in recipient countries has substantially increased. This increase is generating a rapidly growing demand not only for population assistance itself, but also for a greater say regarding the sources and uses of such assistance. Yet, the donor community, having become more conscious of the need for better co-ordination to maximize the effectiveness of its inputs as a result of resource constraints, is involved in setting priorities to regulate the direction, areas, and modes of assistance.

It is as important to resolve this situation, perhaps on an ad hoc basis, as it is to seek financial means to minimize the widening gap between the demand for, and supply of, international population assistance. Apart from striving to ensure a continuous growth in the resources available for population assistance, the donor community should focus greater attention on channelling such assistance to help developing countries meet their basic needs for promoting self-reliance in the formulation as well as the implementation of population policies. It is, however, not only a matter of stepping up technical co-operation and providing financial assistance to these countries. More concerted action should also be promoted towards developing a global strategy to assist developing countries in dealing with their major population problems, rather than merely effecting a transfer of funds between donors and recipients.

ANNEX

TABLE I. TRENDS IN DEVELOPMENT AND POPULATION ASSISTANCE, 1961-1976

	Total Official Development Assistance[1]	Population Assistance[2]	Population Assistance As Percentage of Total Assistance
	(in $ US million)		(in percent)
1976	-	(314)	(2.0)
1975	13 578	290	2.1
1974	11 300	262	2.3
1973	9 400	212	2.2
1972	8 700	190	2.2
1971	7 700	154	2.0
1970	6 800	125	1.8
1969	6 600	86	1.3
1968	6 300	58	0.9
1967	6 600	30	0.5
1966	6 000	34	0.6
1965	5 900	18	0.3
1964	6 000	16	0.3
1963	5 800	11	0.2
1962	5 400	5	0.1
1961	5 200	6	0.1

Notes:

[1] Excluding export credits, private investment, and other commercial transfers.

[2] Net totals excluding double-counting due to transfers between donors. Grants by voluntary organizations are not included for the years 1961-1969. In 1970 these grants amounted to $0.9 million.

- Not available

Sources:

Data are obtained from OECD, governments, annual reports of aid agencies, and organizations.

TABLE II. ASSISTANCE FOR POPULATION ACTIVITIES BY MAJOR DONORS, 1971-1976[1]

	1971	1972	1973	1974	1975	1976
	(in thousands of US$)					
GOVERNMENTS						
Australia	--	357	579	639	1 587	--
Belgium	147	18	75	837	476	934
Canada	2 817	2 835	4 669	5 783	7 718	10 200
Denmark	1 917	1 953	3 990	4 383	4 439	5 032
Finland	263	293	338	476	2 097	--
Germany, Federal Republic of	1 657	2 435	4 392	5 770	13 400	--
Japan	2 090	2 196	2 812	5 293	7 971	12 920
Netherlands	1 539	3 041	5 744	6 140	7 159	8 730
New Zealand	--	77	40	580	880	--
Norway	3 870	5 539	8 600	10 800	18 500	27 400
Sweden	9 194	12 668	11 990	25 385	25 028	27 953
Switzerland	168	191	189	190	200	--
United Kingdom	2 520	6,706	4 225	5 024	7 725	8 400
United States	98 819	124 412	119 002	111 210	109 081	119 141
Others	1 283	1 592	1 747	2 325	3 580	11 356
Sub-Total	126 284	164 313	168 392	184 835	208 949	(252 000)
INTER-GOVERNMENTAL ORGANIZATIONS						
United Nations	6 995	5 952	8 459	20 786	24 234	--
UNICEF	2 382	2 371	3 711	5 753	6 514	--
UNFPA	8 937	19 840	34 684	57 000	71 765	75 600
ILO	165	989	2 259	3 827	4 901	--
FAO	607	574	1 370	1 539	2 238	--
UNESCO	38	28	2 554	4 130	5 337	--
WHO	2 823	6 374	15 991	18 932	22 979	--
World Bank	1 600	5 700	11 200	18 600	24 200	23 000
Others	5 200	6 577	1 789	6 225	6 300	6 300
Sub-Total	28 747	48 405	82 017	139 219	168 468	(173 000)
NON-GOVERNMENTAL ORGANIZATIONS						
Ford Foundation	15 221	14 647	12 353	13 774	10 700	10 800
IPPF	19 294	24 935	33 798	42 910	42 584	45 191
Population Council	14 084	17 360	16 128	15 582	12 076	12 100
Rockefeller Foundation	2 864	6 608	6 370	9 007	8 516	8 500
Others	3 877	4 400	7 400	6 400	6 400	6 400
Sub-Total	55 340	67 950	76 049	87 673	80 276	(83 000)
TOTAL	210 371	280 668	326 458	411 727	457 693	(508 000)
TOTAL excluding double counting[3]						
a) in current US $	154 231	190 154	211 574	261 913	290 103	(314 000)
b) in constant US $ (1970 = 100)	148 299	176 069	185 591	206 231	208 707	(214 000)

TABLE II (continued)

Notes:

[1] Actual expenditures except that some of the 1976 figures are estimates based upon allocations. All figures refer to calendar year.

[2] Annual estimates for the World Bank based upon its commitments according to loan or credit agreements and the planned duration of project execution.

[3] Arrived at by deducting the following from the total:

Governments' contributions to UNFPA;
USAID contributions to IPPF, Pathfinder Fund and the Population Council;
UNFPA contributions to organizations in the United Nations system;
Contributions from one foundation to another.

* Provisional, -- Not available, ( ) Estimated

Sources:

See Table I. In addition, United Nations document E/5673, "Report of the Administrative Committee on Co-ordination on Expenditure of the United Nations system in relation to programmes," and U.S. Consumer Price Index, United Nations, Statistical Yearbook and Monthly Bulletin of Statistics.

TABLE III. GOVERNMENT ASSISTANCE FOR POPULATION ACTIVITIES AS PERCENTAGE OF TOTAL OFFICIAL DEVELOPMENT ASSISTANCE FROM SELECTED COUNTRIES 1973, 1974 AND 1975

	1973	1974	1975
Country		(in percent)	
Australia	0.2	0.1	2.5
Belgium	-	0.3	.1
Canada	1.2	1.2	.9
Denmark	3.1	2.6	2.2
Finland	1.1	1.3	4.4
Germany, Federal Republic of	0.4	0.4	.8
Japan	1.3	1.5	.6
Netherlands	1.8	1.4	1.4
New Zealand	-	1.6	1.6
Norway	8.0	9.4	9.5
Sweden	4.4	6.3	7.3
Switzerland	0.3	0.3	.3
United Kingdom	1.7	1.7	1.0
United States	3.8	3.3	2.7

Sources:

See Table I.

WHERE ARE WE GOING?: AN OUTLINE*

Bernard Berelson

The task of Bellagio IV is to achieve an informed overview by the donor community of the present state of the population field and the forward options therein. Accordingly, this outline will seek to identify issues for donor judgment and decision. The objective is not to provide answers but to raise questions for the Bellagio discourse, and thus to help determine the paths ahead. Where it seems appropriate, these notes will also present the ranges within which the options are probably to be found, in the present state of play.

The central issues involve Ends and Means.

Ends

Clarification of Objective(s)

In the 1960s the major donors supported population with a single purpose: to contribute to socioeconomic development through the reduction of rates of population growth by means of lowered fertility, primarily in the developing countries. That was certainly the dominant reason for the rapid increase of population funds and activities in the 1960s. More recently, that objective has seemed to become somewhat blurred under a variety of pressures: growing sophistication, differentiation, and questioning about demographic/economic interrelations and their importance; incorporation into strong political controversies between rich and poor countries, perhaps some diffusion as the sudden popularity and wealth of the field attracted several interests with associated goods of their own

---

*This is an abbreviated and edited version prepared from Bernard Berelson's preliminary draft. Due to illness, Mr. Berelson was able to make only a few modifications to the draft, and accordingly does not consider this a complete or finished paper. The topic and the title were assigned by the Steering Committee.

109

to promote under the population banner; redefinitions of "population problem" to include not only fertility but also mortality and mobility; probably some dissatisfaction with the major means used for reducing growth (family planning programs) that infected the end itself.

In consequence, the field seems currently to be struggling over the basic issue of what it is after. Has the donor community backed off the attack on population growth as its way of contributing to development, welfare...? To the extent that it has, what are the possible explanations? Was it wrong before about the importance to development, but right now? Did the task turn out to be impossible, hence wasteful of resources, or is the job on the way to being done? Was it put off by political or ideological repercussions over the concentration on growth? Did it simply grow tired of the entire matter?

Whatever the case, the clarity of objective that characterized the field earlier has been, depending upon point of view, either attenuated or enriched in recent years. And different donors have reacted differently. In the context of reaffirmation or change as a central Bellagio theme, the question of objectives is crucial to the entire enterprise and so assumes a natural priority.

> Questions: What is the population enterprise effectively after, short of the ultimate goals of "development," human welfare, quality of life...? Where do we want to go? In what period of time? What are the central objectives? More specifically, is the reduction of population growth still the raison d'etre?

Dispersal in Policy Positions

The scientific and policy-oriented turbulence within the field in recent years has resulted, among other things, in a dispersal of policy considerations and positions. In consequence of recent developments, the donor community appears to be less monolithic in its guiding purposes. There now appear to be five reasons for engaging in large-scale work in population, along these lines.

110

Continue to concentrate on anti-growth. Some agencies persist in considering that to be the main task...either with or without explicit demographic intent.

Encourage and respond to local determination of a country's own "population problem." This rationale has been somewhat on the ascendant as part of the backlash to the perceived dominance of donor determinations in the field in the 1960s. In the intervening years, the operating countries have gained more experience in population work, and with it more confidence, and at the same time some donor incapacities have shown through.

Build the necessary intellectual and institutional infrastructure, especially on the social science side, and encourage and respond to indigenous policies that follow therefrom. Most donors engage in such support as part of their overall programs, even if they are oriented to the reduction of fertility. But there appears to be a small yet significant independent viewpoint that the proper role for the donor community is simply to help build professional competence in the host country and then let policy and program emerge as they will.

Shift "population" attention toward migration and/or mortality. While again all donors are concerned directly or indirectly with these population variables, some are looking more in nonfertility directions and especially toward more concentration on population movement and its consequences.

Work more on associated ends, like health or women's status or poverty reduction or more equitable income distribution. Some donors move from concern with such factors as determinants of fertility to concern with them in their own right - as primary contributors to welfare and only indirectly, as a kind of by-product, to fertility reduction.

Questions: Are there other central tendencies in policy position that can help to clarify the donor role? Does the system (not any individual donor) cover the waterfront adequately and in reasonable balance?

In this context a few matters deserve special mention:

The changing balance in attention to fertility, mortality, migration. Traditionally, the donor emphasis in population efforts has been on fertility, in tacit division of labor with others (e.g., health programs, urbanization) within and outside these donor agencies. Yet there is constant, perhaps increasing, concern with migratory movements, especially internal, with much stress currently on the need for better knowledge but also for action efforts.

Question: Does the balance need to be redressed, especially toward migration and away from fertility?

Growing appreciation of regional diversities. The aftermath of Bucharest sharply revealed the differing concerns about population problems in the three continents of the developing world: growth in Asia, spatial mobility in Latin America, mortality in Africa. There are occasional suggestions about concentrating efforts in a relatively few "key" countries, and there is evidence of an emerging policy concern over low fertility levels in some developed countries.

Question: Is there a need for more regional differentiation or for more concentration on "key" countries in donor efforts?

The politicization of population policy. The increasing attention given the subject has put it firmly in the international political arena, with both positive and negative consequences: on the one hand, that is what policy inevitably involves; on the other hand, political "intrusions" on both policy and program heighten the controversy on a subject that is already sensitive.

Question: Is there a need to re-examine policy and program in light of the changing ratio of professional/political considerations in country dealings with donors?

Tensions within the community. The tensions within such a complex and changeable field spill over into tensions within the donor community itself. The roles of the actors are changing: increasing self-confidence, professional maturity, policy assertiveness on the part of the countries are coupled with lessened dependence on external assistance and perhaps lessened self confidence within the donor community (as witness the several recent "self-studies").

Questions: On the whole, is this a healthy development? Or does it signify lowered community credibility? Or should donor differentiation and specialization be positively encouraged? Whatever the answers, where will new leadership emerge within the overall system?

Means

The means rest of course upon the end(s). But despite increasing attention to a range of population-related issues, interest in fertility policy - in particular, interest in strategies that would help in reducing fertility - continues to occupy a central position in debates over population policy. And in view of recent accusations and confusions, it seems necessary to repeat here that reduction of fertility is not seen as an end in and of itself, but rather as an instrument serving broader objectives of social welfare.

If reduced fertility is the target, what are the means of intervention, in practice or in proposal? The following list is organized under two headings: policies affecting the demand for fertility regulation and policies affecting the supply of methods for such regulation.*

To Affect Demand

1. Establish a new international economic order, designed to advance the prospects of the developing countries, which in turn will tend to decrease fertility and growth; through major revisions in terms of trade, prices of raw materials and finished products, more just distribution and use of resources, etc.
2. Promote socio-economic development more vigorously, with or without the NIEO, to the same ends.

---

*An earlier listing, similar but more detailed, is available in the Appendix.

3. *Re-allocate resources within the development effort in order*:
   a. *to stress the (presumed) basic determinants* of fertility ("*thresholds*") e.g., popular education, infant mortality, income, industrialization, women's status, urbanization; and/or
   b. *to shift overall development strategy* in a decentralized, community-based direction.
4. *Organize community "rules," practices, and "pressures"* so as to change child-bearing norms and/or costs and value of children in the desired direction.
5. *Manipulate incentives/disincentives*, in money or in kind, in an anti-natalist direction.
6. *Inform*, *educate*, *propagandize* people toward lowered fertility.
7. *Impose legal sanctions* ("compel," "coerce"), e.g., on age of marriage, out-migration from villages, family size itself.

To Affect Supply

8. *Improve access* to (more) modern means of fertility regulation, in both coverage and quality of service:
   a. through family planning programs administered more or less "on their own"
   b. through incorporation of family planning programs into broader development efforts, e.g., rural modernization, community development, literacy, etc.
9. *Improve the methods of fertility regulation*, with reference to acceptability and continuity.

Questions: Are there other viable means? What combinations are most valuable, given available resources? What are the proper criteria by which these means are to be judged? - acceptability, feasibility, cost, effectiveness. What are the standards and timetables for judgment? - i.e., what is to be considered "success" or "failure" and when?

That listing deserves some brief comment.

As for 1, that involves large political matters that are not only far beyond the population community but in which demographic considerations will probably receive zero consideration. Almost the same, but not quite, can be said for 2. There is an inherent attractiveness to 3 but major obstacles: the role and influence of the population community in this regard (though note, for example, the Report of the World Bank Panel and the proposed AID "examination of population growth impact" in this connection), the costs and the timetable, the leverage of demographic considerations in such large matters, not least the disagreements over which factors to influence, to what magnitudes, and how. There is a growing interest in the fertility impact of "natural experiments" (e.g., agricultural modernization, rural development, land reform, electrification, etc.) though the programmatic implications of the outcomes are not clear. Similarly, there is much current interest in the possibilities of 4, but serious questions about means. One senses a lessened conviction about the effectiveness of 5 (India) and 6 (except perhaps China, a somewhat special case.) As for 7 (in some cases, again China, combined with 4), much interest/concern is expressed these days over "compulsion" and "coercion," without differentiation along some appropriate continuum, for example:

> Pronatalist pressures of various kinds, legal (e.g., children's allowances) and/or cultural;
>
> Institutional neutrality: legal, though seldom cultural;
>
> Deliberate creation of new fertility norms, no or little organized community support or disfavor over violations;
>
> Deliberate creation of new fertility norms, organized community support and pressure, disfavor over violations -
>
> > Light, e.g., requirement of family planning instruction before issuance of marriage license (Philippines)
> >
> > Heavy (as reportedly in China);
>
> Deliberate creation of new fertility norms, loss of privileges or opportunities if violated (e.g., Singapore, government employees in India); and

Deliberate creation of new fertility norms, actual or potential sanctions if violated (marriage age in India).

The recent experience in India may be telling in this regard, recalling Frank Notestein's old observation that such policies are more likely to bring down the government than the birth rate!

To date, the major means utilized by governments and donors has been a supply intervention, namely, family planning programs to extend access to modern means of fertility regulation (8). Reasons are not hard to find: such programs were do-able, or seemed so; they were financially feasible; they were good on grounds other than demographic and so obliquely justifiable where necessary; they were bureaucratically packageable; they did not run up against many vested interests or power structures; they promised some effect. Finally, and importantly, no realistic programmatic alternatives seemed to emerge, despite searches.

In the event, the results of family planning programs have been mixed: impressive in some places, disappointing in others. According to the latest summary of scientific literature (Freedman and Berelson, 1976), social settings, measured in terms of "modern" levels of infant/child mortality, popular education, standard of living, status of women, urbanization, family structure, are a factor in program achievement. Thus a strong family planning effort can make a substantial demographic impact in "high" social settings (e.g., Taiwan or South Korea), as measured against the standard of 10 points off the crude birth rate in a decade; a moderate but worthy impact in middle settings (e.g., Colombia, Thailand, Philippines); and in the countries with the lowest social settings (e.g., India, Indonesia, Pakistan, Bangladesh) at best an impact of the order of up to 4 or 5 points off the crude birth rate.

The efforts persist, for all the enumerated reasons, right and wrong, and in the absence of viable alternatives. Moreover, although there are numerous critics, there are few direct antagonists (save political); family planning is "a good thing" for other reasons even if "not enough" on demographic grounds. An emerging criticism, however, contends that the public programs have displaced or delimited the natural development of the (more efficient) commercial networks and hence carry a long-term disability for the system.

The questions posed by this array are key ones:

Questions: Can the population field do anything more about affecting the "basic determinants" of fertility than it is now doing? What realistic efforts at improving the status of women are there under a population mandate? How (if at all) can community measures be acceptably implemented with regard to norm creation and support? Is there continued satisfaction that FP programs are the means of choice and the most worthy recipients of major investment in slower population growth? How can they realistically be improved? If family planning (simply the provision of means for "voluntary" use) does not have enough demographic impact in the most needy settings, then should, or "must," the field find its way to "harsher" measures for success? If countries do so on their own, then what ethical and political issues are raised for the donor community? What should be the outcome of conflict between national sovereignty and international humanitarian principles formally enunciated? If there is no acceptable and affordable packaged solution, where does the field go from there?

In addition to such programmatic issues, there are the background issues of institutional capacities. Building up the intellectual establishment in population - training facilities and programs, personnel, data collection, research institutions, policy units, and so on - can be a means either to determinations by the local establishment of their own "population problems" or more directly to policy determination. In either case, or both, a substantial part of the current investment in population from the donor community goes to this purpose - something around 20 to 25 percent. If for no other reason, this area deserves review on this basis alone.

Partly in response to Paragraph 95 of the World Population Plan of Action, there is renewed interest in the establishment of population policy units high in governments. Such a development would surely have important benefits, and is linked to current plans for "impact statements" and "status reports." (Again, the AID proposal, the plans of the Population Council's Center for Policy Studies, the suggestion in the Bank Report of the potential value of a collaborating network of such units. Is that the answer to the constant call for "more enlightened leadership"?)

Beyond that, the present trend seems to be toward increased focus on mission-oriented tasks:

In biomedicine: The International Committee for Contraception Research (ICCR) and the Expanded Programme of WHO, the recent Ford Foundation-sponsored Review of the Reproductive Sciences and Contraceptive Development, and the Royal Society report on the new contraceptive technology.

In social science: The International Review Group (IRG) and the Berelson review in the Population and Development Review (June 1976), the Population Council Review of Institutional Development, the Committee for International Coordination of National Research in Demography (CICRED), the new Center for Policy Studies at the Population Council and the Population and Development Review, the research prescriptions in the Bellagio IV preparatory papers from consultants, the new interest in value of children involving the fields of anthropology, psychology, and economics.

In program administration: The International Committee on Applied Research in Population (ICARP) and the International Committee on the Management of Population Programs (ICOMP).

Despite the great increase in population-related capacity in the past decade or so, there remain at least four debated issues:

1. Is there a need for more, or has the job been done so far as the donors are concerned, except perhaps in the special case of Africa?
2. The change in the international advisory/training system, from teacher/student relations to equal partnership to outright divorce and independence: how much is this the result of considered intellectual decision, how much of political motivation?

3. Always dying but always being revived is the idea of a few regional centers, as now we have the proposal for an international research center in Dacca (reminiscent of the Rockefeller Foundation proposal following Bellagio I), for population institutions modeled roughly after the International Rice Research Institute in the Philippines (IRRI), the Institute of Nutrition of Central America and Panama (INCAP), and the Cholera Research Laboratory (CRL).
4. The unwieldy question, larger than population but encompassing this field too, of the proper relation of deliberately produced knowledge to conscious programmatic action; how to make the knowledge more efficient (e.g., now being tested again through the IRG)?

Questions: How, if at all, is the donor's job changing in these respects? Are any institutional structures missing?

Conclusion

According to the official summary, Bellagio III concluded with a "sobering" consensus: "We are all impressed by how large are the problems, how slowly we see improvement, and how little we know about how to proceed." The problems remain large, but there are many changes (improvements?) and many options. And note how fast positions and visions change in this field.

But current evaluations are part of a certain disappointment about development - not just population. Indeed, is this field worse off, comparatively? We have much more knowledge now; more trained people; more functioning institutions; more policy response; more program implementation; some favorable trends; and a healthy spirit of self-scrutiny that may make the field better off yet (because?) less certain. Wherever the field is going, such developments will accompany it.

Here is a brief reprise of major tasks before the house, in order to determine where we are (should be) going:

Restatement of objective(s), as related to time targets.

Reappraisal of family planning programs, as major means of active intervention.

Viability of alternatives: are there other workable solutions?

Is "the community approach," intermediate to individual (family planning) and structural (determinants) approaches, the hope of the next period with regard both to impact of demographic growth and to planned intervention? If so, how is it to be pursued?

What if "compulsion" emerges as the only alternative to strong growth?

Should the donor community back off its selected measures and concentrate on (1) better knowledge, correct diagnosis of the problem, especially analysis of consequences, and (2) institutional capacity building? And leave policy and program to the countries? Is this the best solution of the "leadership issue"?

Can we get a better handle on resource allocation in the population field?

APPENDIX

Means of Fertility Intervention

I. To Affect Supply

A. Improve the access to modern means of fertility regulation, both quantitatively (to more people) and qualitatively (with better services), through

1. Traditional family planning programs, in various forms and with currently available contraceptives (pill, IUD, condom)	Provision of information, supplies, and services for voluntary fertility regulation via modern contraception and various delivery systems; many examples operating today
2. ...plus sterilization	...and adding sterilization, male and/or female, on an equivalent basis, e.g., as in India
3. ...plus abortion	...and adding induced abortion, on an equivalent basis, e.g., as in China
4. Community-based household distribution of current contraceptives	...emphasizing contraceptive distribution through local agents, e.g., as in Colombia; or in "saturation" distribution
5. Sterilization camps	...concentrating communal facilities and promotion for vasectomy, as in the Indian experience in Ernakulum and Gujarat
6. Postpartum arrangements	...systematically providing information and services in connection with institutionalized delivery, e.g., as in the Population Council-assisted program in 138 hospitals in 21 countries
7. Integration into maternal and child health programs	...organized as integral part of MCH, e.g., as in MCH demonstration programs in the Philippines, Turkey, and Nigeria

8. Integration into general health program	...organized as integral part of total health infrastructure, e.g., as in Narangwal or Etimesgut
9. Integration into community development programs	...organized as part of rural improvement and community development, e.g., as in Gandhigram
B. Improve the product, i.e., the acceptability, continuity, and/or effectiveness of new means of fertility control	Research programs directed toward that end now under way in both private and public sectors, e.g., drug companies, WHO Expanded Programme, and ICCR, to develop and test, e.g., a vaccine or implant, a side-effect-free IUD, a safer or more convenient pill (once a month), a nonsurgical termination of pregnancy...a currently unknown "ideal" contraceptive
II. To Affect Demand	
C. Promote basic socioeconomic determinants of fertility, or the most likely presumed determinants ("thresholds"), singly or together	
1. General development; modernization, social change, sociocultural transformation... away from the traditional (high fertility) society	Reliance on social change, modernization, development, social-structural transformation, "new international economic order" to reduce fertility rates "automatically" in the process
2. Popular education: e.g., a goal of six to eight years of schooling for all	...with special reference to extending popular education, particularly for girls
3. Infant-child mortality: e.g., toward a rate of 50 or below	...with special reference to reducing infant and child mortality as a means of lowering desired family size
4. Income: e.g., toward $500 per capita or, better, $800 (and perhaps more equitable income distribution)	...with special reference to poverty reduction, particularly at the bottom of the income pyramid
5. Industrialization: e.g., toward one-third or less of the labor force in agriculture	...with special reference to industrial development, and its consequences for family, kinship, modern attitudes

6. Women's status: toward liberation from traditional childbearing and rearing, through education and employment	...with special reference to emancipation of women from traditional status, particularly via education and gainful employment, e.g., sewing factories in Egypt
7. Urbanization: toward 25 percent living in large cities (100,000+)	...with special reference to urban development, with its implication for housing, diminished economic value of children, etc.

D. Inform, educate, propagandize:

Persuade people to lower fertility through messages, arguments, appeals, reasons, through

1. Mass media (radio, TV, newspapers, posters)	Provision of energetic propaganda for smaller families, e.g., as in South Korea, Singapore, China
2. Person-to-person communication, individually (e.g., door-to-door field work) or collectively (e.g., group meetings including special interest groups)	...the same through personal contact, including via residential or occupational communities, e.g., as in Isfahan, Sialkot
3. Formal school systems ("population education")	Incorporation of population materials into primary and secondary school curricula, for long-term effect, e.g., as in the Philippines

E. Manipulate incentives/disincentives

1. Housing and job opportunities	) to individuals/ families	Adjustment of incentives/disincentives in money or in kind, in antinatalist direction, e.g., as in Singapore, Taiwan, India Tea estates, and vasectomy camps; development of obligation by the state for provision of welfare to the aged, in order to reduce need for children (sons) for that purpose
2. Maternity costs, leaves, etc.	)	
3. Child allowances, educational fees, etc.	)	
4. Social security system	)	
5. Money, gifts	)	

6. Provision of communal benefits in return for specified fertility behavior	Communal incentives (e.g., schools, water supply) for collective fertility performance at appropriate level
F. Manage community change and "pressure" to develop an antinatalist community consensus, typically guided by the political apparatus, via	
1. Youth corps, or equivalent work program, to break traditional bonds away from the home community	Proposals for collective employment and instruction of young people, both male and female, away from home ties, in order to delay marriage and modernize attitudes and information, e.g., as in China
2. Community "pressures" organized to discourage the Nth child	Organized and systematic efforts to develop community consensus in antinatalist direction, e.g., as in China
G. Impose legal sanctions, via	
1. Increase in age at marriage	Increase in minimum age of marriage for women, to at least 18 and preferably beyond, e.g., as in China, Tunisia, India
2. Restriction of out-migration from villages	Limitations in mobility, such that villages cannot export local unemployment to cities but must face up to support of their own excess reproduction, e.g., as in China
3. Direct limitation on family size	Governmental imposition of a limit to childbearing, e.g., as in proposals by policy analysts and in recent tendencies in India and China

POPULATION POLICY AND THE INTERNATIONAL DONOR COMMUNITY:
A PERSPECTIVE ON THE NEXT DECADE

Paul Demeny

Perceptions by national governments of the relationships between development and population change in the less developed countries reflect the great diversity of objective national situations with respect to developmental status and prospects. However, with some violence on subtlety, simple distinctions can capture essential elements that characterize broader classes of countries.

In most LDCs, the governing elites see development as a process that is to eliminate the relative backwardness of their country vis-à-vis the developed world. Dominant aims thus tend to include rapid progress toward high average levels of income and consumption, elimination of poverty, and achievement of a high degree of political stability and of national self-respect. The main tool for achieving these aims is rapid economic growth which entails sustained increase in the average productivity of labor, typically requiring industrial development and, at least for small- and medium-sized countries, increased integration into the world economy through participation in international trade. With some simplification, LDC economies may be described as consisting of two sectors: a modern sector and a traditional one. The crucial distinctions between these two sectors, which need not be elaborated here, center on the degree of capitalization of the production processes and the nature of technology utilized which, along with differences in institutional arrangements regulating employment and distribution, result in marked differences in levels of productivity, wages, and incomes between the two sectors. Development means that a structural shift is taking place - that is, that expansion of employment in the modern sector is faster than the rate of overall population growth. Sustaining that condition will in due course result in decreasing absolute size of the traditional sector, and, eventually, complete absorption of the latter into the modern sector.

Given this overall characterization of the development process, government attitudes on population questions will tend to be strongly influenced by the perceptions of the elites as to the effect of population growth on this crucial structural shift.

Two contrasting situations may be usefully distinguished: situations in which development is succeeding and those in which it is slow or faltering. These situations imply quite different perspectives on the role of population in the development process, hence call for different responses from the donor community.

When Development Is Succeeding

Successful development is characterized by the modern sector's rapid gain - in terms of employment and, by extension, in terms of the share of the population accommodated - on the traditional sector over time. Signal success cases are South Korea and Taiwan. When, as in those countries, overall growth rates that substantially exceed the rate of population growth can be sustained, demographic expansion, even if very rapid when measured by historical standards, is unlikely to cause alarm as a major menace to successful economic development. Nevertheless, it may still be seen as an unwelcome drag on the development process by governments, since it makes the absorption of the traditional sector slower than it otherwise could be. Also, it will be often realized that, on the long term, a protracted period of rapid population growth will make attainment of high standards of living more difficult, particularly if natural resource endowments are poor, or if the country must depend heavily on international trade in satisfying its food and energy needs, or if international outmigration does not provide a convenient safety valve. Thus, even if economic growth is rapid, foresighted governments may be inclined to opt for an activist population policy, aimed at speeding up the process of demographic transition. For the reasons just suggested, the merits of such an option are likely to be appreciated by policymakers much sooner in countries like Korea or Taiwan than in countries like Brazil, Mexico, or Nigeria.

However, if modern sector employment expansion is indeed successfully sustained at rates far exceeding the rate of population growth, even if antinatalist policies are adopted they will tend to be relegated to a modest role. This tendency is reinforced by the virtual certainty that rapid economic growth and the antecedent and concomitant social-structural changes will in due course induce a change in demographic behavior in the desired direction. Even though marked differences in cultural patterns do suggest a degree of caution in generalizing about the relationship of demographic change to development patterns, it can be expected with fair confidence that the classical mechanisms that are familiar from earlier successful development stories, and are observable in the modern segment of the economy locally, will be operative. In particular, rapid economic growth will tend to increase the economic cost of children, and decrease their economic contribution, to the family. Successful development of the economy also makes upward social mobility potentially attainable to increasing segments of the population, and it is quickly realized by most people that such mobility will be easier to achieve with a lowered family size, and perhaps also delayed marriage, since the latter permits better entry for women into the labor force, faster acquisition of desired consumer goods, and substitution of quality for quantity in investing in children's upbringing. For the less upwardly mobile, upward social mobility by others appears as a threat to their existing relative status, eliciting defensive counter-action, an important element of which may be reduction in fertility. Desired behavioral changes consequent upon development thus tend to generate a growing demand for fertility control by couples, a demand which is apt to be satisfied by self-help (resort to traditional birth control practices) or through eliciting appropriate birth control services through private markets.

Thus, while governments that favor fertility decline are likely to respond to the emerging demand for birth control services and information, and even governments that are less interested in aggregate fertility are likely to start providing such services on efficiency or welfare grounds - much as they tend to enter such social service sectors as health care or primary education - the effect of such programs is not likely to be very large. Well organized government family planning programs may succeed in hastening the onset and accelerating the speed of fertility reduction in many cases; but by and large, they are likely to be meeting an existing or emerging demand that would be met in other ways in their absence. The longer term role of the government in such activities will tend to be determined by the philosophy of social policy and by efficiency and budget considerations rather than demographic concerns.

The Role of the International Donor Community

In a number of LDCs which managed to develop rapidly in the postwar period and are in the process of closing the gap that still separates them from the lower income developed countries, the international donor community played a significant role in helping to launch or to sustain and expand family planning programs. An initial assistance role may also be taken by the donors in the future for launching or speeding up such programs in a number of countries - including the three populous countries mentioned above - where economic development has already created or is now creating the preconditions for the emergence of the large-scale micro-level demand that successful service programs require.

Indeed, if the international donor community rises to the challenge of providing large-scale assistance to family planning programs in the more successful LDCs, it could have a major role cut out for itself at least for the next 10 or 15 years. There is little doubt that international funds channeled into such endeavors could be well spent. If demand for services exists, efficient government operated delivery programs can be organized with reasonable assurance of success, particularly if the requisite human resource needs of the programs are well satisfied, as they clearly could be in the type of countries under discussion. Given sufficient resource inputs into such programs, the demographic transition in these developing countries could take place under more humane conditions than was the case in the countries that have completed that process in the past. A similar, if less strong comparison may exist with the conditions that would obtain in these countries in the absence of well financed and well run governmental programs.

At the same time, for reasons suggested above, it is difficult to be overly sanguine about the potential contribution of such donor assistance to the overall character and eventual outcome of the development process, including its demographic components. Clearly the intended level and distribution of donor investment in such programs must be the subject of careful scrutiny. It is a sound conjecture that often the results of benefit-cost analysis will be less than clear-cut.

Therefore, the donor community is facing a dilemma. Its population program activities could greatly expand in the next decade or so if funds were made available for the purpose on a grant basis, or at concessionary rates. The main limitation to such a development, however, is likely to be increasing unwillingness of legislators and other relevant decision-makers in the developed countries to continue to underwrite a significant fraction of the cost of programs that, once established, tend to become a permanent fixture of social policy. The very economic success of many of the recipient countries, and the manifest signs that fertility is being increasingly controlled by the voluntary choice of individual families, will tend to erode the case for continued significant donor assistance to those countries in which development is well under way. Indeed, assistance to family planning programs has been or is being phased out in a number of instances. Elsewhere such an initial role is still continuing, but on a decreasing scale.

Whatever the outcome of the conflicting currents bearing on the flow of international assistance to national family planning programs in those countries in the foreseeable future, a strong case for rendering assistance upon request in training, research, and policy analysis may remain valid and will call for sustained international donor action. There is an even stronger putative donor role in sustaining a steady flow of information on program performance and organizational experience for the benefit of other developing countries. These roles require the investment of relatively modest resources.

When Development Is Slow Or Faltering

The population problem emerges in a quite different light when demographic growth is rapid (because of reduced mortality and sustained high fertility) and economic performance is such that continued material backwardness of a large and, in absolute terms, expanding segment of the population is the most likely outcome of continuing present trends.

In the paradigmatic cases - such as those of India and Indonesia - the recipe for a successful drive to economic maturity is still seen by the governing elites from the vantage point of the modern sector. In a sense, the process - the central facet of which is likely to be industrial growth - appears to be working, since the modern sector is expanding. However, the promise of success is spoiled by the realization that the modern upper crust of the economy is too thin in relation to the traditional sector, still gaining rapidly in size. Contrasts in wealth are likely to be sharpening, and with the numbers of poor growing in absolute terms, the elites perceive that the country is moving toward a stage of demographic saturation that is not consistent with the successful integration of the entire population into a high income, high consumption economy even in a longer time perspective.

The implications of the situation are not pleasant to contemplate either from the point of view of the advanced segment of the economy, or, less selfishly, from the point of view of those within the traditional sector. For a long period, the two components of the national economy may grow side by side with little interaction. As long as the traditional sector is able to accommodate its demographic growth, or, rather, all those not absorbed by the modern sector, it may be largely neglected and ignored - not necessarily by intent and rhetoric, but by virtue of concentrating a disproportionate share of governmental attention and resources on the promotion of the development of the more dynamic segment of the economy. Indeed, with political power residing in the modern sector, this has been the dominant attitude of modernizing elites. However, such an attitude has become increasingly self-defeating in a number of developing countries that matched rapid population increase with sluggish economic growth during recent decades. Particularly in a number of densely populated agrarian countries the traditional sector no longer performs smoothly its functions of serving as a passive reservoir containing (even if in conditions of dire poverty) population growth and as a convenient reserve pool of labor for the modern sector. Under the continual impact of a variety of changes - notably demographic saturation, adoption of capital-intensive technology, intrusion of modern business practices and property relationships into the traditional sector, and the elusive attraction of modern-sector job opportunities - the traditional (primarily rural) sector has become vastly more mobile, with its hidden labor surpluses becoming more visible and with demographic growth no longer flexibly accommodated within it. Thus, open unemployment appears in rural areas, class conflicts become sharper, and the poorest segments of the population - no longer protected by traditional social arrangements - increasingly become marginalized. Whenever urban conditions hold promise of some improvement for rural folk, massive movement from rural areas to urban shantytowns ensues, creating or rapidly swelling the size of a low productivity urban subsector whose needs for relief are not as easily ignored as those of its rural counterpart. These developments are sometimes seen as due to "excessive urbanization" or attributed to "lack of proper policies on internal migration." However, such migration is largely a lagged manifestation of rapid population growth combined with economic growth that is too slow to reduce the numbers of the poor in the traditional sector by labor absorption or to exert sufficient influence on the traditional sector to induce transformation of demographic behavior within it.

Major upgrading of modern-sector performance (i.e., more rapid industrialization) remains the most attractive solution to these problems to the governing elites; but in most countries with poor growth performance it is increasingly realized that that option is not available as a realistic early solution to the problems outlined. For large countries, population size alone may bar the option for the kind of explosive export-led growth that was open to small economies such as Taiwan or Korea. Events in the world economy during the last few years lend further basis for pessimism as to the long-term economic prospects of large agrarian countries along that line. Governments intent on economic development are therefore searching for alternative ways of dealing with what they increasingly recognize as their population predicament.

If migration outlets are not available, the natural first impulse invariably is toward attempting to slow population growth through conventional family planning programs. The response to such programs by the population within the thin modern sectors is not unlike the response of the populations of the successful countries, but the population in the traditional sector - unleavened by the influence of economic development - may be largely impermeable to family planning programs offering exhortation, information, and subsidized birth control services.

If it is found that family planning programs fail to live up to their hoped-for potential, three courses for population policy may be considered.

1. The deficient performance of the family planning program may be seen as rooted in some remediable weakness of the program. The diagnosis calls for tinkering with the existing machinery and for trying new formulas: better financing, better leadership, a different organization table, better contraceptives in more attractive packaging, more information and exhortation through the media, and so on.

2. The service delivery machinery of ineffective family planning programs (ineffective because of lack of effective demand) may be combined with more or less heavy-handed application of coercive adminis-

trative measures to create the clientele desired by the government. The limits of such actions are traced by organizational capacity, by tolerance levels of the "target" population, and by the degree to which the government is willing to apply coercive measures. The equivalent of this approach in the field of migration policy is the imposition and enforcement of strict restrictions on internal, particularly rural-to-urban, migration.

3. The focus of the government's policy may be shifted to address the issue of fertility motivations. Whether success in that field is considered as a necessary precondition for energizing languishing family planning programs through demand creation and for launching more effective family planning programs later, or as sufficient in and by itself, is less important than the changed order of priorities such a shift in policy-orientation entails. Three subvariants of such a shift may be usefully distinguished. The first is characterized by the attitude that the best population policy is development itself: given success on that score, the demand problem will take care of itself.

The proposition is unexceptionable, but it may reflect a failure to understand the syndrome that permitted the emergence of a population problem - a concomitant existence of poor development performance and rapid demographic growth - to begin with. Thus, under this formula things may be simply permitted to drift, in the expectation that the population problem somehow will go away. The potential scope and attraction of such a policy need not be underestimated. Not many countries face population problems as severe as, say, those of Bangladesh: by that token, many countries that fall into the category under discussion could go on for a considerable length of time before they might perceive the population problem as sufficiently severe to call for effective intervention.

Second, government development policies may be formulated with much greater consciousness of what is known about the linkages between specific facets of developmental change and individual and family motivation toward lowered fertility. Development efforts may then emphasize what is believed to be helpful on those accounts. This is a field that has only begun to be explored. There is a strong tendency to see the task as launching a series of specific programs in areas such as maternal and child health, education, women's employment, old-age security, etc., or the combining of such program elements (including family planning services) in packages integrated into broader economic and social efforts such as rural development schemes. Since the primary purpose of programs of this kind is obviously to serve needs that are non-demographic, the population policy element in carrying out such programs may be best thought of as a conscious and sustained tilt or bias in formulating and executing social and economic policies.

The third alternative in addressing the issue of changing socially untoward demographic motivations is also based on the realization that the latter are linked to the character of the development process but locates the problem in deeper layers of the existing social structure, not permeable by the programmatic approaches of the sort referred to above. The key common characteristic of the latter is that the social interest in lowered fertility is spelled out at the central governmental level and then the government tries to reach down to the micro-level, seeking to change motivations of individuals and individual families. But if there is an interest in lower fertility visible at the national level, such an interest may also be present at stages intermediate between the government and the family. The core of the problem then may lie in the non-existence or weakness of intermediate-level social organization that would be able to explicate and act upon group interest in changing demographic behavior. Government policy, particularly with regard to the rural population, may then concentrate on (a) fostering the capacity of lower-level organizations, particularly of village communities, to deal with a broad range of developmental concerns that affect their interests, and (b) the development of administrative and institutional arrangements that maximally internalize the costs and rewards of developmental and demographic behavior within communities. When population problems are serious, it would be logical to expect that the success of such a development strategy would result in the natural emergence of a clear perception of community interest in slowing demographic growth and in subsequent community enforcement of behavior consistent with the common interest. However, while the focus of the policy would be structural reform, presumably with emphasis on community-level organization, there would remain a significant and continuing role to be played by higher level government in encouraging communities to consider demographic behavior as one of their concerns, and to help them to deal with that issue effectively. However, as is the case with efforts to impart a demographically informed bias to governmental development programs and projects, systematic consideration of the modalities of structural institutional reform as a tool for changing the incentives that shape demographic behavior, and of the government's programmatic posture implied by such reform, has yet to be carried out. This is so even in countries where the promise of such efforts would seem to be the greatest - that is, where a very large proportion of the population lives in densely settled rural areas.

The Role of the International Donor Community

The actual and potential roles of the donor community in affecting population policies in the countries that experience rapid population growth and whose development is slow or faltering are large, both in their capacity to do good and to do harm.

Vigorous assistance has been given to poor countries that wished to launch family planning programs, and such assistance - donor funds permitting - may expand greatly in the future. The inclination of poor countries to request and accept such assistance can be confidently expected to grow steadily, particularly for assistance in launching family planning programs integrated with health-care delivery programs. Assistance for family planning should normally deserve high priority from donors. Though in supporting these programs, far greater donor attention should be given to at least two major issues than has thus far been the case.

One, the dominant model of the organizational administrative arrangements for family planning - centralized pyramidal bureaucracies - supported by foreign assistance supplies some of the worst instances of transferring technology that is misplaced, ineffective, and costly. Preference for that model, although admittedly well reflecting both the natural centralizing impulses of LDC governments and the convenience of the funding organizations, flies in the face of the historical experience in the West and much accumulated experience in present day developing countries. Once established, the organizational features of the family planning programs are likely to be perpetuated by local vested interest, quite likely to the long-term detriment of program success, and at the expense of alternative models that might have emerged. In addition, the aid recipient governments will tend to be locked into commitment to programs that they will find increasingly onerous and costly as the share of foreign assistance in their financing is gradually decreased. These problems, as stated here, focus on centralized family planning programs somewhat unfairly, since such programs represent only a particular manifestation of a syndrome common to numerous development programs. Fostering efforts to explore better solutions for increasing the access of potential customers to good quality birth control information and services would seem to deserve the highest priority by the donor community in the coming years. As was indicated previously, accumulating evidence of disappointing program performance has resulted in searches for better ways of organizing family planning programs. However, such searches tended to take the basic parameters of the dominant centralized bureaucratic program design as given, concentrating on second-order issues. Yet, a more fundamental and wider ranging consideration of alternative institutional solutions for health and family planning supply systems would be a highly rewarding enterprise. The donor community should encourage and support efforts in that direction.

Second, donors should prepare themselves to anticipate and face the difficult issues that will arise if aid recipient governments, frustrated by lack of sufficient progress, move to energize the

136

machinery built up by family planning programs by creating demand through coercive methods. Clearly, beyond certain limits, the deference expected from foreign donors to local political and value judgments cannot be invoked by them as an excuse from moral responsibility for the use of such methods. What those limits are should be considered and made explicit at an early stage of donor-recipient relationships.

It is unlikely that spelling out some simple and universally valid principles will suffice in such matters. What is needed is a concerted effort by the donor community to foster and participate in a much more conscious consideration of the rationale for population policies and a systematic evaluation of alternative policy options and their social costs and benefits. To be most effective, such investigations should be carried out primarily within the key units for making population policy decisions: that is, within individual countries. Present weaknesses of population policies in most developing countries reflect the simplistic arguments on which action in the population field was often advocated by the international community and the inadequacies of the conceptual and analytical bases on which national policies were developed. Indeed, this is the area in which the donor community faces its most important task in the coming years.

Channeling greater resources into policy development and analysis should be a highly productive endeavor. The experience of the past 10 to 15 years demonstrates that shortcuts and compromises in policy development in order to "save time" and to "get on with the action" have been largely counterproductive. Stress on the "world population problem" and on "global population pressures" often has had the effect of persuading national policymakers that they are asked to deal with someone else's problems - a grossly distorted perspective. Focus on the aggregate dynamics of population growth and age distribution in the analysis of the economic effects of population suggested a uniformity of the problems that was clearly at variance with the diversity of national developmental situations. Representation of the task of population policy as one of avoiding impending catastrophe - rather than one of helping to find an optimal development path - tended to deflate interest in population in the numerous national situations in which the prospects of "failure," "collapse," or "overpopulation" seemed properly quite farfetched. Single-minded concentration on the family planning approach in attacking the problem of rapid population growth diverted attention from the fundamental issue of demand and further, in instances when the deficiency of demand clearly transpired, encouraged the false notion that the key strategic need is for better birth control technology.

The stock of applicable and useful knowledge on the interrelationships of demographic processes and socioeconomic development is admittedly deficient, calling for sustained efforts in the fields of data gathering and research in the social sciences. Nevertheless, pulling together knowledge and information that already exists could provide the basis for generating stronger interest within individual nations in population policies and for considering alternative policy options. The donor community could help realize this potential by promoting country-based efforts to carry out systematic policy review and analysis, and by building up and sustaining an institutional base, both national and international, that could effectively support such efforts. In the coming decade, this should result in a decline of the number of countries that profess disinterest in population policy issues. But more important, such action would hold out the promise of substantial progress in developing new policy approaches that could deal with population problems more effectively than is the case at present. It can be confidently suggested that such new policy approaches will seek to affect the overall character, balance, and style of development policy, or will operate through structural/constitutional reform, rather than take the form of specialized population programs and projects aimed at manipulating particular facets of demographic behavior.

NOTES ON STRATEGIC ISSUES IN POPULATION

George Zeidenstein

Within the broad context of development, population has generally been seen as a sectorial concern, with family planning as its primary component and with its own objectives, agencies, programs, and funding requirements. This approach is valid in situations in which there are large or growing pools of demand for birth planning or latent demand that can readily be stimulated by education and exhortation. In this context, current issues are fairly concrete. Although they are frequently difficult, it is relatively easy to hold them in programmatic focus.

The hard core of the population problem lies elsewhere, however - precisely in those situations where requisite degrees of demand do not exist and cannot be generated by skillful application of red-triangle posters and puppet shows. Here the issues are a good deal less concrete and perhaps more fundamental; it is more difficult to keep them in programmatic focus. The mechanisms for identifying and resolving the issues appear to lie in a broader approach to population policy development. Such an approach involves identifying and altering the intervening variables that affect individual fertility behavior. In section A we attempt to raise issues surrounding this approach, particularly as it responds to some of the problems of the sectorial approach in situations in which demand for fertility regulation services is at a low level or even absent.

Although the developing countries in which demand for fertility regulation services is sufficient for large-scale family planning programs to be effective are in the minority, their numbers are increasing, and the demand for assistance in initiating such programs is likely to continue to grow. Thus in sections B and C we raise current issues in the sectorial approach both to family planning programs and to contraceptive technology development.

In section D we raise questions regarding the roles and coordination of public and private organizations, and section E contains closing comments.

These notes are intended to encourage discussion, not to advocate particular points of view.

A. Policy Development and Related Cultural, Social, Political, and Behavioral Factors

Improving National Policymaking Processes

Population policy is still usually organized sectorially by governments (typically under the command of the ministry of health and family planning). However, development policies in general - and especially certain key facets like education, rural development, employment, urban-rural wage differentials, income distribution - have a strong influence on the kinds of behavioral changes required to affect population variables. Even though the relevant relationships cannot be readily quantified, a systematic scanning of socioeconomic policies from the point of view of their anticipated demographic effects would be a potentially important contribution to the policymaking process. Evaluation of demographic impacts may be necessary on two levels: broader and higher; and lower and narrower.

Broader and higher. Is the prevailing line of thinking that seeks to identify development-population linkages and then searches for specific programs or program components to manipulate each linkage adequately fruitful?

Inevitably, that approach seems to involve conceptualizing the policy agenda as a long list of specialized levers competing for the attention of centralized policymaking bodies. As a rule, organizing effective programs capable of manipulating more than a few of these levers is beyond the financial and organizational capacities of concerned governments. After all, not only is there a diverse array of population action programs for policymakers to consider, but population itself is just one of the many development issues they have to tackle.

Thus, priorities have to be established, but the complexity of the problems to be solved seems to prevent isolated lines of attack from working well. Failure of a particular programmatic action becomes an argument to try another lever and, in turn, to explain lack of success in the new endeavor by the absence of simultaneous effort on related fronts.

Program is piled upon program. The process seems both wasteful and bureaucratically bloated. Yet simultaneously, it is certifiable as under-financed, starved for skills and resources, and inadequate for the task at hand.

One response to the steady accretion of specialized action programs is the current search for integration by creating multipurpose programs with numerous specialized subcomponents. However, in multipurpose programs, gains in balance tend to be negated by organizational complexity and a resulting inefficiency. Administrators of, say, integrated rural development programs resist the introduction of population components because they are reluctant to further stretch an already overloaded administrative structure.

To have an impact on population, development (including population "components") has to be integrated, indeed, organically integrated. But the complexity that centralized integrated programs involve seems to present an insurmountable obstacle. How is this dilemma to be resolved? Can complexity be broken down to manageable pieces without sacrificing organic integration if the direction of movement is toward smaller territorial units rather than functionally specialized vertical components?

Perhaps a key strategic task is to strengthen or, if none exist, create and build up areal capacities to handle developmental tasks and find the optimal distribution of functions among the various levels. In other words, it may be that a key strategic issue for the late 1970s and into the 1980s is structural reform: a shift of attention and emphasis from the results of particular development programs to finding better structures for going about the business of development.

Lower and narrower. Sectorial allocations of public investment, specific design and content of major development projects, and more generally, the style of development policy are likely to be affected if the anticipated demographic impact is adequately considered in deliberations of policymakers. The international community might do well to stress the importance of recognition of demographic impact by policymakers and to facilitate the creation of appropriate institutional mechanisms to influence decisions. Examples are (a) appointment of high level population units as suggested in the World Population Plan of Action (paragraph 95); (b) consideration of population impacts in advance of major allocation and program decisions; and (c) periodic preparation of country-level comprehensive analyses assessing demographic-developmental relationships and evaluating alternative development policies in their light ("status reports"). Concerning (b), most often identification of the anticipated population impact would introduce only a supplementary consideration into benefit-cost analyses. However, the cumulative effect of such consideration on the overall direction of social and economic policy would be important.

Going Beyond Population Policy as a Sector Activity

The natural tendency of the international community to favor policy action promising relatively speedy, tangible, and direct payoffs and to favor actions calling for infusions of technology and other resources requiring foreign exchange, has made family planning programs occupy center stage in the arena of internationally sponsored population policies. In contrast to other approaches, family planning programs can be carried out as reasonably well-defined sector activities, with their own sizable cadres, software, and high and intermediate technology.[1]

By now, limitations of such a single-sector approach are appearing, particularly in countries where population problems are most severe. As a result, there is a salutory search for additional policy approaches. However, is there still too strong a sectorial inclination within the international community? The objects of the search seem still to be programs that are "fundable," "tangible," and "population-labeled." Even the current interest in "integrated" approaches seems to imply development programs that contain or carry ("piggy-back," as it were) identifiable birth planning subcomponents. Could more organic alternatives be identified or created?

Bucharest's message, correct although neither well spelled-out nor yet adequately digested, is that fertility behavior is a reflection of the socioeconomic structure and its pattern of change. Hence, fertility behavior is not likely to be amenable to manipulation by a set of compartmentalized projects. Perhaps the strategic focus of attention is development itself, and accordingly, a second key issue on the population policy agenda is to understand how overall development strategy and the small-grain structures of development policy affect population changes, and then to apply that understanding in development policymaking.

Far from deflating the importance of population considerations in guiding the development process, this view might elevate them to a place of influence that they do not now have. That influence would not need to be measured mainly by the size of "population" items in budgets, nor would it depend on relabeling parts of relevant programs as their "population components." For example, inclusion of women as visible and active participants in a rural development project, an improved social security scheme for the aged, development of a network of rural savings institutions, promotion of a functional literacy project for urban adult women, or a public works project need not be labeled as "population components" even if the arguments for their adoption and styling have been materially influenced by consideration of their expected demographic effects.

The Global Population Problem vs. National Population Problems

A substantial share of the international flow of resources supporting population programs seems traceable to global concerns. Those seem to manifest supranational interests in modifying national demographic processes. Yet most of the deleterious as well as the positive effects of demographic behavior are contained within national boundaries. The main, often the only, motive force for governmental action is perceived direct national interest. And even perceived national interest is sometimes clouded by what is seen as outsider's intrusion into the domain of national decision-making arising from motives that are suspect.

What is the appropriate balance between stress on "global" concerns with population processes and stress on the sovereignty of national states and the diversity of national population problems? How should the international community formulate the problem - in what specific mixture do population problems call for global response or for decentralized action that internalizes the costs and benefits of national demographic behavior? In what style and tone is the international community to approach national governments?

These issues are complicated by further questions about the degree of responsibility that the international system claims or is willing to assume and sustain for conditions in the constituent states. International responsibility would suggest a right, even a duty, to be involved in matters that affect international contributions to problem-solving. Conversely, international involvement with national population policies, if the recipients of the advice cooperate, entails assumption by the advisers of a degree of responsibility for the well-being of the population affected - an obligation that is not well recognized or defined but nevertheless seems implicit.

A much greater degree of consciousness and clarity within the international community concerning the rationale for and philosophy of their actions might help to clear the air and, by the same token, might lead to sounder policies.

The National Interest vs. Individual Interest

The issue just outlined at the international level is echoed within each nation. Governments perceive a national population problem and seek to solve it, often by appealing to the national interest. However, national interest is rarely sufficient to motivate individual behavior; the art of population policy is to find ways to harness individual motivation to serve social goals.

Has the international community in the past introduced or reinforced a disproportionate stress on aggregate formulations of the population problem and a corresponding disinclination to analyze population issues from the point of view of the individual or relatively homogeneous subgroups within the national population? If so, this bias may have been responsible for misjudgments about the potential effectiveness of certain types of governmental population policy actions and may have resulted in failures to explore more adequately ways in which individual motivation could be affected. To what extent can and should the international community use its influence on national policymaking processes to rectify this bias? Or is this beyond the responsibility of the international community? Should international participation in national policymaking processes instead be limited to promotion of a better understanding of alternative choices that are available (capacity development and deployment)?

Cultural and Developmental Diversity

Is there an excessive tendency in the international community to see population problems and their potential remedies as only minimally culture-specific? Is the great diversity of economic and social conditions reflected in social structures, resource endowments, sizes of countries, and their trading potentials, for example, largely overlooked in analyses focusing on the similarity of certain overall demographic characteristics, such as levels of fertility, trends in population growth and mortality, or the status and dynamics of age distribution?

Similarly, are suggested policy prescriptions too often insufficiently sensitive to cultural differences that affect, among other things, the relative valuation of economic gains and noneconomic values such as conformity to social norms? If so, this may have generated unrealistic notions about feasible and desirable future patterns of development and demographic change.

Conversely, international stress on certain human rights and values as universal may retard national action that could result in attractive policy trade-offs when measured by local standards. By the same token, if such national action nevertheless materializes, the international community may find itself in a quandary about its responsibility. May it not then be tempted to resolve the dilemma by resorting to moral subterfuge? The issue here is to find proper balances between universally applicable norms and the play that must be given to social and cultural pluralism within the international system.

Role of Women in Policy and Program Development

It remains the case that very few women participate in the councils where population and other development policies are made. Nor are there substantial numbers of women high in the agencies where population programs are formulated or implemented. This is equally true in the international community and in national organizations. At the same time, women are the principal "targets" or "objects" or "beneficiaries" of most family planning programs and other birth regulation undertakings. Does the virtual absence of women as actors in the policymaking process and at senior levels of the program formulation and implementation affect these processes adversely? Many observers argue convincingly in the affirmative.

At the same time, it appears that few women are both available for the work and adequately qualified. If this is true, should the international community make a concerted effort to help increase the pool of interested and capable women? In the past, international community interest in increasing the numbers of, say, agricultural economists has made an important difference.

North and South

Implicit in several of the earlier subdivisions of this section but not thus far made explicit is that population as an interest of the international community may be imbedded in north/south and new economic order debates. To the extent that this is so, is it related to poor country perceptions that the main interests of the wealthy international community are limited to short-term demographic change in the poor countries and rapid, cost-effective distribution of contraceptives rather than to improvement of the welfare of individuals? If such a perception is in fact correct, how can the international community respond to it? Do the main interests of the international community need to be broadened? If the perception is not correct, what is the actual scope of the international community's interest in population? Is there a need to delineate the scope and disseminate that information?

Some Programmatic Issues

Resources. Should the policy aspects of population receive enlarged financial support? The knowledge base on which policy design can draw is inadequate, and the payoffs for improvements in policy-related knowledge are potentially very high. The existing institutional and human resources in the field are limited. Should the international community support development of the resource bases for policy-oriented social science research as a priority matter?

Objectives. Presumably, the central objective if the international community were to take up population policy development as a priority would be to enlarge national and international capacities to understand population policy issues and to order development policy decisions in ways conducive to desired population ends - consistent with other development objectives involved. Also, to understand in detail the likely impacts of population dynamics on development plans. Can the objectives be quantified or otherwise made more concrete? Should there be additional objectives as well?

Approaches. Classical approaches to population policy development have focused on institution-building and training programs to increase the knowledge base. Such approaches could be expanded, and others could be developed as well. For example, postdoctoral research fellowships could be provided to draw social scientists into interdisciplinary policy orientations, and informal networks could be formed for collaborations between social science institutions willing to become interested in policy matters:

- One possible focus might be the preparation of a series of periodic "status reports" by groups of institutions of concerned countries.
- Another focus might be a series of in-depth rural studies to increase detailed, qualitative, as well as quantitative, understanding of behavior at household, village, and intermediate levels below the national level.
- Still another focus might be coordinated investigations of a series of completed or nearly completed development programs or projects ("natural experiments") to discover and describe their demographic effects (or "side effects").

Particularly useful results might be realized from loose networks of high level governmental population policy units of the type recommended in paragraph 95 of the World Population Plan of Action:

- An initial point of possible comparison and consultation between them might be formulation of protocols for studies of the impacts of population dynamics on development plans.
- Another might be the converse, studies of the impacts of development projects on population dynamics. In this connection, there may be an interesting example in the proposed section 117 of the pending 1978 United States foreign assistance bill.[2]

Relationship to other projects. Many of the agencies represented at Bellagio IV are major development assistance agencies for whom population is only one sector. In most cases, their expenditures in other development sectors far exceed their population expenditures. How will the international community itself incorporate population policy considerations in making decisions about its development undertakings?

- How can these agencies undertake to predict and monitor the impacts on population behavior of their other development activities?
- Is it a matter of high priority for them to attempt to do so and, insofar as possible consistent with primary objectives, to insure that the population side effects are as good as they possibly can be?

- How can they insure that probable impacts of population behavior on their other development projects are more fully understood in advance of investment?

Policy Intervention Examples

To successfully modify aggregate demographic processes in a socially desired direction, public policy must affect their behavioral roots in the family and its individual members. The two ultimate targets - complementary rather than alternative - of policy intervention are (a) individual preferences affecting demographic choices, and (b) the objective factors, and their perception by individuals, that condition and constrain those choices. This proposition is briefly elaborated here with examples regarding fertility. However, it is equally applicable to all facets of demographic behavior, including mortality, nuptiality, and migration.

Changes in both (a) and (b) tending on balance to reduce fertility are spontaneously engendered in the process of socioeconomic development. However, conscious policy choices can reinforce change so as to speed up the decline of fertility. To do so, policy interventions must generate one or more of the following impacts as perceived and experienced by the individual women and men who make the choices:

- Change individual norms regarding childbearing and sexual behavior. Policy intervention examples: education, exhortation, propaganda, to establish new values and standards on age at marriage, sexual behavior outside marriage, parental obligations, and norms concerning the quality of children's upbringing, and to change aspirations about lifestyles or present new models of behavior that increase expectations of material consumption, or accumulation of physical or human capital.

- Increase direct costs* of children payable by parents. Policy intervention examples: change the ways in which education is financed, manipulate tax laws.

- Increase indirect costs of children. Policy intervention examples: increase women's opportunities in gainful employment particularly when it is strongly competitive with childbearing and child rearing, manipulate tax laws.

---

*"Costs" is always used in its broadest social sense.

149

- Increase relative costs of children. Policy intervention examples: manipulate access to and prices of competing goods by increasing exposure to and decreasing relative costs of consumption goods, producers' goods, and financial savings.

- Increase opportunities for upward social mobility for oneself or one's children or felt need to resist erosion of one's social status when these are positively related to limiting fertility. Policy intervention example: redistributive measures that compress differences between adjoining social strata in the income-distribution pyramid.

- Decrease productive contribution of children to the household economy. Policy intervention examples: compulsory schooling, child labor regulation, increased parental access to alternatives for old-age security.

- Reduce frequency of infant and child deaths, that is, reduce the number of births needed to reach a desired number of surviving children. Policy intervention example: support programs to improve child health and speed up reduction of infant and child mortality.

- Reduce costs of practicing birth planning. Policy intervention examples: assure easier, more dignified access and use, greater safety and convenience and effectiveness, lower price, of birth planning services and information.

This list is not exhaustive and the examples are merely suggestive. In contemplating the problem of specific policy design in any given situation, one immediately encounters the problem of inadequacy of the knowledge base on which policy design can draw. In many instances of key causal relationships, even their direction is not known; more typically, their quantitative strength can only be guessed. Accordingly, the payoffs to improvements in knowledge are potentially very high. Thus, there is a strong case for policy-oriented social science research in this field. This research needs to focus not only on the "rational person" approach underlying the above examples; it needs to concern itself with impacts of political considerations and with cultural and other social norms that affect demographic behavior in all of its varied components.

The family planning approach covers essentially the eighth and last item on the list above, and to a smaller extent, through its communications components, the first item. What is common to the first seven items on the list is closeness to other development issues - that is, they involve changes in the patterns of development. Questions of proof of fertility impact need not arise any more in these cases than in the case of reducing the cost of practicing birth planning. The historical record of Europe and Japan and the contemporary experience of several more rapidly developing countries of the developing world are evidence of the fertility impact of changes in the variables listed.

B. Design, Operation, Management, and Evaluation of Systems for Delivery of Birth Planning Services and Information

A Less Pessimistic View

In the preceeding section we presented a respectful view of the limitations of the single-sector, top-down approach, which supplies birth planning services and information in centralized programs. We questioned the assumption of that approach that enough demand exists at the household level, and we questioned the feasibility of organizing and maintaining centralized mechanisms for delivering sufficiently good quality service on a sustained basis in areas of greatest need. The first problem calls for demand creation: mechanisms to discover, explicate, and assert the collective interest in lowering fertility, and to translate this into individual behavior; the second calls for a solution to the major flaw of the centralized supply system - it is energized from above rather than from below, where the demand is supposed to be. Both problems focus attention on the weakness of intermediate-level social organization and, therefore, on the critical strategic need to remedy that weakness. But a less pessimistic view of the problem is possible, and the following observations proceed from it.

The rapid social change taking place in many developing countries is creating demand for fertility regulation along the classical lines:

by providing positive and negative incentives for lower fertility at the household level. Demand is not as soft as pessimists claim. In any case, its growth represents a rising tide. Furthermore, birth planning programs themselves contribute to speeding the tide. Similarly, obvious weaknesses of the supply programs organized thus far to meet demand are not beyond the reach of conventional prescriptions. Greater attention by governments, better financing, better training of cadres, sheer persistence, among other things, can make a big difference.

In this view, the international community is essentially on the right track. A number of signs may be interpreted as certifying that such is indeed the case. Several analysts credit the widespread appearance of fertility declines, as measured on the national level, to existing family planning programs. Also, despite Bucharest, national appeals for more outside assistance for launching new family planning programs, or expanding and sustaining existing ones, have not slackened. In fact, much demand for such assistance remains unmet. Thus the existing central (but not exclusive) strategy of the international community - to support delivery and related communications systems - should be to hold the course firmly but improve and extend performance.

There are, nevertheless, numerous and difficult issues.

Resource Allocation

In the late 1970s and early 1980s, where should the international community focus its resources? On buying contraceptives? Building health centers? Supporting country program budgets? Concentrating on capacity-building, especially in the social sciences, with the view that in this way countries will be better able to take their own initiatives and the international community can ultimately cooperate with country initiatives rather than interpose its own initiatives?

On a more general level, are levels of funding and human and institutional capacities adequate, and, if not, what needs to be done?

- Birth planning versus other development investments: Are the proportions about right, or should birth planning receive a larger or smaller share?

- Delivery of birth planning services and related information versus social scientific policy research and development of new contraceptives: Again, are the proportions about right or do they need to be changed?

- Selection of countries and groups: What standards should be applied among countries and, within countries, among groups such as rural people or the urban poor?

- Minimum programs: What are they, and what resources would be required to establish them in selected countries?

- Institutional bases: Are there enough and are they strong enough? Are there sufficient trained people? How much more is required in Asia? -Africa? -Latin America? -North America and Europe?

Objectives

As Mr. Berelson pointed out in his paper for this meeting, there appears to be confusion over objectives. Presumably all will agree that arresting excessive population growth remains an objective. What is "excessive" requires serious consideration in various regional, national, and subnational contexts. Additional objectives suggested by Mr. Berelson relate to mortality and migration. Should there be others as well? Which of these objectives are/should be priority issues for the international community?

- Quality of service: Should improved service be an objective in itself? Arguably, more than enhanced demographic impact could be achieved. If the availability and use of birth planning services and information can in itself be a change agent, the quality of service - the dignity and ease with which it can be obtained and used - could be an important variable.

- Rural people and the urban poor: Should reaching these groups be articulated as special objectives for the years ahead? The major delivery efforts of the past seem not to have reached either group in significant numbers in more than a small number of countries.

- Demographic impact: Now that we know that demographic objectives set for earlier delivery programs were overly optimistic, what should be the demographic objectives of future family planning and other birth planning programs?

- Human welfare: Perhaps the most important issue here regarding objectives is the extent to which direct and current improvement of human welfare should be seen as an objective of programs and projects for the delivery of birth planning services and information.

Means

The questions are numerous and varied. This grouping is more or less arbitrary.

- Birth planning technologies: Which should be used where? Presumably the ideal is that the widest variety of technologies be available to the widest groups of potential users.

- Delivery systems: What sorts? We know a good deal about clinic-based, community-based, MCH-based systems. Should experimentation be encouraged? In what direction? Integration, decentralization, involvement of women as actors, and use of commercial sectors may be important leads to follow and develop.

- Information, education, and communication: What do these terms mean programmatically? Can substantial demand be created by IEC? If not, are they nevertheless important means toward longer term population-related ends?

- China: Do we need to know more about it in order to improve our own programmatic means? If so, how can we learn systematically and authentically?

- Similarities and differences at regional, national, and subnational levels: How can they be recognized adequately in program terms? To what extent is decentralization necessary, appropriate, and possible?

- Ethical problems: Coercion or compulsion? Presumably it makes a difference to the international community if either is used and to what extent. If direct and current improvement of human welfare is an objective, can coercion or compulsion fit in?

Administration and Evaluation

Techniques for evaluating the demographic impact of family planning and other birth regulation programs have become highly sophisticated. Some observers argue that they are excessively sophisticated - at least insofar as their data requirements have seemed to impose excessively heavy collection chores on delivery systems and on the persons who should benefit from these systems. There are additional questions concerning the scope of evaluation in future years and its use as a tool for strengthening administration.

- Opportunity costs: Should evaluation seek to measure opportunity costs? Some observers say, for example, that international emphasis on government programs may have foreclosed the growth of other systems that perhaps would have been more efficient and long lasting.
- Birth regulation programs as agents of change: How can their possible modernizing impact be evaluated? Do they contribute to development more broadly, as suggested earlier?
- Information for decision-making: How can the results of evaluation be made more useful to program managers in making day-to-day decisions?
- Lightening the load: The data production load borne by many delivery programs may have an important negative impact on the willingness of people to use the service. How can this load be lightened while maintaining adequate evaluation?
- Networks: ICARP and ICOMP may be useful examples of networks of professionals from different countries and different programs with different experiences but broadly shared objectives. Are they valuable? Should they be strengthened, expanded? Perhaps additional networks need to be established not only in the delivery field but in the fields of social scientific policy research and contraceptive development as well. It might be a challenge for the international community to take initiative to devise and fund initially the establishment of additional networks, as international mechanisms for evaluation and exchange of information.

Beyond Family Planning: the Complementarity of the Points of View in Sections A and B

It would be incorrect to see the policy implications of sections A and B as representing polar opposites or alternatives. Many specific national situations call for remedial action both through broad policy development and through sectorial provision of birth planning services.

In areas in which sectorial family planning programs are currently under way or planned, there are a number of steps "beyond family planning" that are worthy of serious programmatic consideration now and that lead logically into the more organic integration of population with other development efforts suggested in section A. They include the following:

Services for voluntary sterilization and abortion. Sterilization and abortion services need to be available along with the other birth planning services. Recent activities in India have increased political sensitivity about sterilization immensely; similarly, abortion is an inherently sensitive subject and is legally restricted or prohibited in many countries. Nevertheless, with careful attention to local circumstances, the international community could play an important role in assisting governments and other local institutions to insure that effective, safe, and dignified means are available to as many citizens as possible for voluntary sterilization and voluntary induced abortion (where legal).

Abortion is common throughout the world, whether legal or not. Where it is illegal, poor women who avail themselves of inadequately skilled abortion practitioners are often maimed or killed. Is there any assistance that the international community could offer to countries where abortion is illegal to reduce the suffering of women whose only recourse has been inadequately performed abortions? Good birth planning services and information are one positive response. There are others - especially through provisions of training and facilities for treating incomplete abortions and offering birth planning services (IUDs perhaps) to women receiving service.

For both sterilization and abortion, are clinic-oriented programs sufficient? Rural people are not likely to be well served if sterilization and abortion services are restricted to a formal health infrastructure that does not extend very far into the rural areas. What can and should the international community do to help countries having inadequate health infrastructures for rural sterilization and abortion services to work out safe and effective alternatives? Regarding abortions, especially early ones, it may be possible to train midwives or other paramedics to perform safe and effective abortions using available simple techniques. Additionally, simplification of safe and effective sterilization and abortion techniques may be an important focus for future biomedical research (see section C).

Breastfeeding. Prolonged lactation has substantial demographic and health effects in extending the time between births. It has a further beneficial health effect for children where adequate facilities for bottle feeding or adequate nutritional supplements are not available. In addition, breastfeeding enhances immunogenic capacities in babies. But the practice and duration of breastfeeding in developing countries tends to decrease with modernization. Effects of the shift from breastfeeding to bottle feeding are dramatic in many poor countries not only in a demographic sense but also in the poorer health of infants.

Programs could be undertaken to counteract pressures, propaganda, and other factors that encourage women to shift from nursing to bottle feeding - especially in situations in which contraception is not available or acceptable and in which extended nursing is desirable for the health of the infant. Such programs could also involve education of medical and paramedical personnel, as well as education of women themselves, about benefits of breastfeeding. Various factors would need to be taken into consideration if such projects were to be supported. These include the potential conflict between breastfeeding and wider roles outside the home for women, and better understanding of the optimum duration of nursing from the health point of view for mother and infant and from the demographic point of view. Such programs would be logical complements to already existing family planning programs.

Changing the roles and status of women. The hypothesis is that as women are afforded attractive chances to participate in economic opportunities outside the home, their self-esteem and their value in non-mothering roles as perceived by other family members will increase, and they will enjoy greater degrees of participation in decision-making about their own lives and the well-being of their families.

Although the demographic impact of projects to improve the roles and status of women might be indirect, the assumption is that it would be substantial in the long run, through a rise in age at marriage, reduction in the number of children desired, and increase in the spacing of births. Projects could be especially tailored to benefit poorer segments of society both rural and urban. They could involve formation or strengthening of networks of women's organizations providing a basic infrastructure for bringing birth planning information and means to the attention of participating women.

Community-orientation strategies. Community-orientation implies greater attention in overall development strategy to such goals as reducing poverty rather than increasing aggregate wealth, increasing food consumption rather than increasing aggregate food production, improving health conditions rather than creating more medical infrastructure. In addition, community-oriented strategies seek to expand the areas in which individuals have control over the choices that affect their lives. Community-oriented approaches imply shifts in management responsibility and accountability away from centralized agencies toward more local ones. The hypothesis is that community-oriented development would create demand for birth planning, in addition to its other benefits. In the context of community-oriented development, a formal family planning program could become organically integrated with other development projects within the community.

* * *

Given the range of approaches outlined in sections A and B, how does one select which approaches to use when and where? The most effective way to examine the agenda may be to start with a recognition of the greatly divergent national situations that underlie population/development issues and the diversity of responses called for. Korea is unlike Bangladesh, Iran is different from Egypt. Propositions that are valid for Brazil make less sense for the Dominican Republic. A broad categorization of poorer countries, reflecting the combined influence of such factors as developmental stage, resource endowments, international trade prospects, population size, and cultural-political factors, could be an essential first step toward defining priorities and differentiating between the kinds of contributions the international community could usefully make in each situation.

C. Fertility Regulation Technology and Reproductive Biology[3]

Before proceeding with a listing of issues and options in this area as we see them, we wish to raise an issue of central importance. Is the knowledge base adequate to support new and innovative applied work? That is, are the leads already being worked on pushing against the limits of available basic knowledge? A related question: Is there a substantial gap between basic knowledge available about the male and the female reproductive systems? If the answer to any of these questions is affirmative, what steps can and should the international community take regarding research and the training of researchers?

Safety and Health

Substantial research on the safety of various contraceptives is undertaken but, as the Greep Report (*Reproduction and Human Welfare*) has pointed out, more is needed. In addition, it may be necessary to devote special attention to the overall health effects of contraceptive use. This would require weighing risks and benefits for which existing methodologies are not entirely sufficient. Should the international community take special interest in encouraging more and better research, on a worldwide basis, on the safety and health effects of contraceptives?

Resource Allocation

What level of funding should the population field seek for its work on fertility regulation technology and reproductive biology (including, specifically, monitoring the safety and health effects of contraceptive use)? And what should be the sources?

Funding levels. There are basically three positions:

- Significantly reduce the level of funding. The potential payoffs related to technology may no longer be as pertinent as they once were judged to be in comparison with opportunities in other areas, e.g., service delivery, policy development, or programs in other development-oriented sectors that may influence fertility behavior.

- Maintain the current level of funding. This level has prevailed since Bellagio III. If it continues in the years ahead, the field can expect to experience strong internal competition for preferential allocation of the limited resources.

- Significantly increase the level of funding. Public demand for safe, acceptable, and effective contraceptives is greater than ever before. Use of some modern methods may need to be curtailed or abandoned because of their hazard to health. More resources would help to bring about more rapid progress in meeting these needs.

Sources. Potential sources for new funds include:

- Redistribution of current overall population budgets to devote a larger share to these areas.

- New contributions from private philanthropic sources in developed countries.*

- New contributions from private commercial sources by stimulating greater participation by the pharmaceutical industry.*

- New contributions from the health and social welfare components of national budgets in developed countries.*

- New contributions from international development assistance monies in the national budgets in developed countries.*

- New contributions from international development assistance monies in the budgets of multilateral agencies.*

- New contributions from population, health or other monies in the national budgets of developing countries, either from local revenue components or from development assistance monies.

Recycling public funds. Another important funding question has to do with ways to recycle public sector funds invested in research and development on contraceptives. For example, assume that several million dollars are invested by segments of the public sector in the development of a new contraceptive, and assume further that savings

---

*Recommended as a priority objective in the Greep Report.

realized by other segments of the public sector on purchases of the new contraceptive at special public sector prices equal or exceed the research and development costs. Is there some way to recycle the public sector savings to finance further research and development? Would this be desirable? If so, what should the international community attempt to do about it.

Objectives

Should the population field adopt new objectives to guide its work on fertility regulation technology and reproductive biology? The principal guiding objective since Bellagio III has been to develop technology having high effectiveness. Other possible complementary objectives have been either rejected, not considered, or pursued at a comparatively low level of intensity; however, each of these objectives has its strong advocates who seek a larger share of the available resources. Bellagio IV may wish to consider suitable mechanisms that could be used to evaluate and choose from among them. They include (with attention to safety and health effects an important element running through):

- Conduct basic and mission-oriented research in reproductive biology to produce knowledge needed for technology development. Prior to Bellagio III, this strategy was virtually coequal with the technology development strategy that now prevails, but it has since received comparatively much less emphasis. This may be the time to increase the basic research emphasis.

- Develop new appropriate-level technology for which high acceptability may be a primary consideration rather than - or in addition to - 100 percent effectiveness.

- Adapt existing technology, both traditional and modern, to local conditions to increase its acceptance and effective use.

- Conduct research in selected fields outside of reproductive biology to bear on technology development efforts.

- Conduct research in acceptability to ascertain the needs of prospective users of fertility regulation technology in order to improve information and delivery systems as well as the associated technology.

Means

How should the population field pursue its objectives in the area of fertility regulation technology and reproductive biology?

Research and development strategy. What type of strategy is needed? Research and development aimed at new fertility regulation technology needs to be strategically focused. Three current strategies involve continuous scanning of all basic and mission-oriented research output in order to do one of the following:

- Initiate research and development with all leads that appear to offer feasible opportunities for new technology compatible with delivery by national family planning programs (the "push" strategy followed by WHO, ICCR, and, to a large extent, the NICHD programs).*
- Initiate research and development only on leads having a high probability of being successfully developed and of being good commercial products (the "push" strategy modified by the "pull" of the marketplace; the strategy followed by the pharmaceutical industry).*
- Initiate research and development only on leads having a high probability of being appropriate for and acceptable to poor couples in developing countries (the "push" strategy modified by the "pull" of needs and conditions in developing countries).

In addition, there is a fourth option, as yet untried: using readily available basic knowledge about reproductive medicine, search out leads for technology that is specifically designed to meet local needs and conditions of use (the "pull" strategy used extensively in the People's Republic of China). This strategy has primarily resulted in modifications of existing technology rather than in the development of new technology, but it has never been attempted in the context of a well-developed research and development base.

Geographical strategy. In the area of research and development, donors have largely rejected the option of building up capacities for sophisticated modern research and development work in all nations because of the prohibitive costs and the time frames that would be

*Recommended as a priority objective in the Greep Report.

required. The Greep Report recommends building up capacities for such research and development in highly developed western countries and in selected developing countries that possess comparatively strong scientific infrastructures. In the areas of basic research and clinical research, however, an alternative strategy is generally followed by donors seeking to strengthen global capacities. This strategy calls for building up capacities at varying levels of sophistication in all nations, according to their capabilities and national interest. This latter strategy may be feasible in relation to some research and development objectives, as well, and may deserve further consideration in this connection.

Disciplines. Which disciplines should be involved? To some extent this is a question of resources - the more disciplinary input, the greater the likelihood of success - but important issues of emphasis are also involved, with three options to consider:

- Concentrate efforts around research in the broad family of biomedical disciplines associated with reproduction.*
- Widen efforts to include research on materials and research in the social sciences associated with the behavioral components of fertility regulation technology.
- Widen efforts to include, in addition to research in some or all of the above areas, less rigorous practical research and testing conducted at a decentralized level by non-professionals as well as professionals.

Organization. How much organizational centralization should there be in research and development? In spite of repeated calls for large crash programs and for less overlap and competition among existing programs, the population field has basically endorsed the second option below through its funding patterns. However, the disproportionately high funding of one of the existing programs and pressures on the smaller programs to assume more limited roles as a part of a staged research and development process suggest some indecision, and a deeper consideration of the principal options seems called for.

---

*Recommended as a priority objective in the Greep Report.

They are as follows:

- Mount a massive integrated program to develop selected new fertility regulation technologies.
- Support and loosely coordinate a small number of integrated contraceptive development programs, each possessing broad research and development capabilities, parallel objectives, and a certain degree of centralization.*
- Establish different programs for different facets of research and development, with sufficient overlap and strong coordination to ensure stepwise integration of the individual efforts.
- Establish a diverse, decentralized network of programs varying in breadth of their research and development capabilities and in their objectives.

The Role of Industry

The pharmaceutical industry has played a constructive but comparatively minor role in efforts to develop new fertility technology for public sector use during the last five years. Some of this participation has entailed industry's traditional role as a developer of new commercial products (minipill, Dalkon Shield IUD, Progestasert IUD, Copper-7 IUD, new spermicides, new condoms, low-dose oral contraceptives), and some has involved direct collaboration based on agreements giving commercial rights to industrial companies, with public sector research and development efforts (postcoital pill, prostaglandins, manufacture and distribution of Copper-T, and development work on a number of still-experimental new methods). Both of these roles appear to be stable. Increased participation in research and development is likely only if further financial incentives are provided.* These could take the form of public sector subsidies for industrial research and development, more favorable patent and licensing terms, special guaranteed-profit insurance arrangements, or direct payment for specialized services.

By contrast, the pharmaceutical industry has played a dominant role in the manufacture and distribution of fertility regulation technology for the public sector during the last five years. Since alternative public sector mechanisms for these activities have not been seriously developed or planned, it is likely that industry's role as the world's manufacturer, packager, and distributor of contraceptives will greatly increase in the years ahead as new technologies are developed by both public and private sector research and development programs.* The terms for this expanded interaction between industry and the public sector need to be developed during this period.

---

*Recommended as a priority objective in the Greep Report.

Ethical Issues in Clinical Studies

During the last five years, great strides have been made in safeguarding the rights and welfare of subjects who participate in clinical studies of fertility regulation technology. Basic standards calling for the informed consent of such subjects and for a formal and ongoing process of review of the ethics of such studies by peers of the investigator have been widely adopted.

Universal adoption* and adequate mechanisms to ensure enforcement are still needed, however. Furthermore, understanding is increasing about the practical difficulties of the consent process, the weaknesses inherent in peer review mechanisms, and the subtleties of risk-benefit assessments. As such insights arise, they need to be incorporated into practicable standards, policies, and processes to further safeguard the welfare of human research subjects. Consideration needs to be given to ways of minimizing the pragmatic problems and inherent conflicts of interest that can act as barriers to this process in the population field.

Evaluation

Has work on fertility regulation technology and reproductive biology met the field's objectives? The answer must be yes and no. The programs established during the last ten years have clearly achieved many important intermediate objectives, such as the building up of

*Recommended as a priority objective in the Greep Report.

research and development capacities and the production of significant amounts of knowledge. In this short time, progress in developing new fertility regulation technology has necessarily been more modest. To undertake a useful evaluation of its efforts to date, the field must clarify its intermediate objectives and the ways they relate to ultimate objectives. Such a clarification would provide a framework for performance and planning in the areas of fertility regulation technology and reproductive biology. It would be of immense practical assistance to those conducting work in this area, as well as to those evaluating progress in the population field as a whole.

In contemplating such evaluation, it is also useful to consider whether additional mechanisms are needed to coordinate, guide, and evaluate work on fertility regulation technology and reproductive biology. Current mechanisms include the Bellagio population meetings, _ad hoc_ funding reviews conducted by individual donors, internal mechanisms for evaluation and direction in the organizations participating in these areas, and annual meetings for information exchange by the major public sector contraceptive development groups. The Greep Report recommends several additional mechanisms for fact gathering and information sharing in the areas of fertility regulation technology and reproductive biology. The current and proposed mechanisms provide only limited forums for guidance and for evaluation of activities in these areas, and consideration of additional mechanisms may be warranted.

Planning for the Longer Range

What long-range planning would be useful? What contingency planning is necessary to prepare for the possible curtailment of use or even withdrawal of the oral contraceptive in developed countries? Long-range planning has not been considered feasible, or particularly necessary to date. However, most large, sophisticated research and development fields have found long-range planning to be helpful in decisions on resource allocations, and the field of fertility regulation technology may now have matured sufficiently to benefit from this approach. Long-range planning might be undertaken in relation to technological objectives, means, and manpower and institutional requirements. It might also be feasible and useful in the area of research on the safety of fertility regulation technology.

During the past five years evidence of adverse side effects associated with the use of oral contraceptives has mounted to the point where the safety of this widely used method is now being questioned. It is possible that the USFDA may seriously restrict or even withdraw its approval for use of this contraceptive in the United States during the next five years.

Most developing countries rely on USFDA decisions in making their own policies concerning drug use and could be expected to take action similar to that of the USFDA. However, almost no information is available about the side effects associated with the oral contraceptive when used by women in developing countries, although significant, and possibly favorable, differences are expected in comparison with the findings from developed countries (where such factors as cigarette smoking and relatively higher incidence of heart disease increase the adverse effects of orals).

The situation is further complicated by the heavy reliance being placed by national family planning programs on the oral contraceptive as the principal method for nonclinical paramedical delivery to rural couples. The importance attached to this mode of distribution has led to the abandonment of prescription requirements in many developing countries.

In view of the widespread use of the oral contraceptive (50 million users worldwide) and its great importance to family planning efforts in developing countries, it may be advisable to develop suitable plans for meeting the contingency that the use of this method could be greatly restricted in the years ahead.

Values

What ethical stance should the population field adopt in its work on fertility regulation technology and reproductive biology regarding the potential for coercive or compulsory use of that technology? Concern about the coercive or compulsory use of sterilization has been expressed by groups in a number of countries. New fertility regulation technologies, such as drug-releasing capsules that are surgically implanted under the skin or long-acting vaccinations against pregnancy, possess added potential for coercive administration. Does this pose ethical problems strictly in relation to delivery of these technologies, or are there additional ethical responsibilities associated with the development of such technologies as well? If there are, how can those working in this area properly discharge such responsibilities?

D. Roles and Coordination of Public and Private Organizations

An important issue that has been discussed many times before concerns cooperation and coordination among public and private organizations. Is there enough? If there should be more, how is it to be achieved? How is organizational autonomy and identity to be preserved while improving the overall impact of individual inputs by broad cooperation and coordination?

Is it true that private organizations are often better able to undertake innovative, experimental, sometimes riskier, projects than public organizations, and if so, does this suggest a natural division of labor between public and private organizations? Is the smaller scale experimental and innovative work of the private organizations useful enough to justify their existence? Could the public organizations do that work just as well or better? If not, how are the private organizations to be encouraged to intensify their innovative experimental work? And how are the results of their work to be adequately evaluated and disseminated so that the lessons learned from it can be made available to the larger public organizations?

There is the centrally important question of funding. The bulk of funds available within the international community are generated by the public organizations, especially national governments and, to a smaller extent, private foundations. The public multilateral organizations themselves receive funding from the national governments. The relatively large number of private operating organizations are funded in a variety of ways but generally do not receive support from national governments or multilateral public organizations. Is this pattern the best which can be devised? Does it produce generally adequate funds? If not, what alternatives can be considered?

E. Closing Comments

In this review we have not attempted to make recommendations because we believe the participants are better qualified than the Steering Committee for that task. Instead we have limited ourselves to framing issues and in some cases stating alternatives. As the field of population has grown, as more and more developing countries have become concerned over the impact of population variables on their development efforts, and as the number of organizations, governmental and nongovernmental, international and private, attempting to respond to these problems has grown, the issues have become increasingly complex.

We have attempted to group the current issues in three broad areas: population policy development and related cultural, social, and political and behavioral factors, which have received increasing attention in the 1970s and appear to suggest significant new leads for the 1980s as well; design, operation, management, and evaluation of birth planning delivery systems and information, the dominant approach of the 1960s, and an approach for which demand seems to be escalating rather than diminishing in this decade; and fertility regulation technology and reproductive biology, in which the dual issues of safety and local acceptability have gained increasing importance.

The first of these areas is new, largely untested, and it is in this area that the scope for new theoretical work, new programs, and sharing of new approaches is greatest. In the second and third areas, the challenge is more to reassess past efforts and present and past directions to insure that efforts do not become so institutionalized that they fail to move in new directions more responsive to needs.

These are the central areas for intervention as we see them today, and they may not be the only ones. The task at hand for the participants is a large one - to choose not only among these areas, but within them, which approaches should receive priority in the allocation of funds, facilities, and professional and nonprofessional personnel. Such choices will affect the course of the field and its contributions in the broader context of development in the years to come.

FOOTNOTES

[1] An issue not discussed here is whether alternative ways of organizing such a sector activity have been considered. The striking similarities among the corresponding governmental programs in a large number of diverse developing countries (almost invariably highly centralized pyramids) seems to suggest a negative answer.

[2] The proposed text of Section 117 begins as follows: "Examination of Population Growth Impact - (a) Assistance under this chapter shall be administered so as to give particular attention to the impact of all programs, projects and activities on population growth. All activities proposed for financing under this chapter shall be reviewed to identify their possible impact on human fertility. Particular attention shall be given to opportunities to build motivation for family planning into programs in other fields such as education in and out of school, nutrition, disease control, maternal and child health services, agricultural production, rural development and assistance to the urban poor. Care should be taken to consider indirect as well as direct influence on fertility."

[3] The international meetings in London in April 1977 will delineate many of the important issues under this heading, and the Bellagio IV participants will receive papers prepared on the basis of the April meetings. This section was prepared before the April meetings.

SUMMARY COMMENTS

David E. Bell

These comments are intended to set forth some of the highlights of this meeting as they appeared to me, and some of the implications that might be drawn to guide subsequent action. I make no attempt to reflect all that has transpired in this meeting: Mr. Potter, our rapporteur, has taken copious notes and will be producing a record for all of us. (I have made a few revisions in these comments following the meeting, in an effort to benefit from the suggestions made during the last hours after the presentation of my initial version. The statement remains my own, however, and makes no claim to speak for the group.)

Conference Highlights

For me, one major highlight of this meeting was the evidence presented by many participants of the rapid changes occurring in the population field.

There has plainly been a continuing increase in the developing world in the awareness of population problems, the adoption of programs, the evolution and change of programs after adoption. Since we met last in Bellagio III, in the spring of 1973, programs like that in Indonesia have moved, in Dr. Suwardjono's phrase, from a fledgling stage to one of maturity. Countries such as Mexico and Vietnam have embarked on major efforts. We have seen the trial - and failure - of the first effort to base a national program on coerced sterilization. And the last major areas of the developing world without national population programs - Brazil and West Africa - seem to be approaching the point of public action. All this is extraordinarily rapid in a historical sense, and has moved us - so fast that many in advanced countries are left arguing old issues - from a time when the main question was whether nations ought to address population issues as matters of national policy to a time when the main question is how to do so most effectively.

A second major respect in which this meeting gave me a sense of rapid change was the extent to which there was around this table consensus that a new and broader approach to population problems is emerging. We were helped in this not only by the papers prepared for the meeting but also from the benefit of Mr. McNamara's recent speech at MIT. Notice how remarkable this consensus is: four years ago we were just beginning to say to each other that we needed to try to understand the complex, two-way relationships between population and development. Here we not only embraced without dissent Mr. McNamara's identification of several key elements of social development which show a close correspondence with fertility declines, including larger opportunities for women, lower infant mortality, more education especially for women, better nutrition, and so on. In addition we accepted with acclamation Dr. Mahler's proposals for decentralized, community-based health programs (which would be only partly medical) to embrace fertility services. I interpret this meeting as ready to accept a powerful, sweeping set of ideas which were hardly on the horizon four years ago. That seems to me a very rapid rate of intellectual change in a complex social field.

I should at once enter two caveats. One is that there is much about the relationships between population changes and other social changes which we understand only dimly, and as Dr. Miró, Dr. Hopper, and others reminded us, much careful research, analysis, and experimentation lie ahead before we can state the relationships with more precision.

The second caveat is that we do not have clear ideas about how to put many of the new ideas into effect. While we were all, I am sure, ready to enlist yesterday morning in Dr. Mahler's crusade to build a new health system centering on first aid, hygiene, and nutrition, the heart quails and the knees tremble when one thinks of the massed phalanxes of the world's medical professions - in industrial and developing countries alike - who will oppose that idea with all their power and prestige.

Nevertheless, as Mr. McNamara stated so forcefully at the end of yesterday afternoon, while there is much we don't know, there is also much we are reasonably sure about, and on which we should proceed to act.

Another highlight of this meeting, to me, was the sense that the interest among donor agencies in population is verging on a new phase of liveliness and increased funding. It may be that I am unduly influenced by the American scene, but I have had the sense for the last two or three years that population activities so far as donors were concerned were in a static phase. Some of the rhetoric of Bucharest had bruised us. The U.S. Congress was in a mood of "what's-the-use, the world's population growth is unmanageable." The private foundations were in financial trouble.

Whatever may have been the case, the mood at this meeting seems to me much more positive. We have heard intimations of rising funds from the British, the Canadians, the United States. Mr. Tabah underlined the observation made by Mr. McNamara in his paper, that the rate of population growth on a world scale has begun - even though only slightly so far - to slow down. Carmen Miró correctly reminded us that despite the rhetoric, Bucharest produced a World Population Plan of Action which is a sane and solid basis for international action. We have heard about the increasing sophistication of family planning programs, like that of Indonesia, which plainly are having an impact on fertility. Our discussions underlined the consensus that population policy is not a matter of supporting family planning _or_ development, but of supporting both as mutually reinforcing contributors to human welfare. And we shared the pleasant sense that putting population policy in its correct place among national development policies couples it with all sorts of appealing objectives: better nutrition, lower infant mortality, broader income distribution - even enhanced human rights. Even the hardest-hearted, most cynical finance ministers and legislators surely cannot resist such an attractive package!

None of this belies the huge tasks ahead. But it seemed to me to give us a legitimate sense that the directions of policy are clearer, and the prospects for progress brighter, than some of us had been thinking.

The third highlight of the meeting for me was the renewed sense of urgency, communicated by so many participants, to get on with a list of important things that need doing to cope with the world's population problems.

What Needs to be Done

1. The list begins with several elements related to family planning programs, for as Julia Henderson and others emphasized, fertility information and services are still unavailable to many millions of families in developing countries, and very inadequately available to many more millions.

a. The first requirement is for detailed, specific, country-by-country development of family planning services - a highly diversified task, as Mr. Salas emphasized, since different countries are at different stages of awareness, policy determination, and administrative evolution. There is no universal prescription for the provision of fertility services, a point made to us by the Madam Minister from the Sudan, by Mr. Zahidi, and by others. Each country has to be looked at in its own cultural and historical setting. But there is increasingly a common judgment, stated forcefully here by Mr. Michanek, Ambassador Green, and others that successful family planning services require extensive decentralization, integration with other community services, and local participation in decision-making. How to achieve these objectives through governmental programs in developing countries which have operated traditionally through centralized bureaucracies is an extraordinarily difficult task, which is now being addressed in some countries and will have to be addressed in many more.

There is consequently no doubt of the continuing need for years to come of external assistance for family planning programs, but several participants noted that the nature of the assistance will change over time. Mr. Gille emphasized that external assistance should be focused more on building local competence to design, test, and carry out programs. Mr. Zeidenstein, Dr. Sai, and others stressed the importance of supporting private as well as governmental experiments to improve services in diverse local settings. Dr. Suwardjono noted that while as programs mature they will increasingly be financed by local funds, external assistance will continue to be needed for consulting, training, research collaboration, and other special purposes. Miss Henderson noted that present programs are especially deficient in reaching young people. Dr. Mahler and others emphasized the importance of research, training, and other measures to improve the management of family planning programs (and of broader population programs integrating family planning with health and other services). And Dr. Suwardjono, Mr. Wahren, and others noted the useful appearance of regional groupings, like the intergovernmental coordinating committee in Southeast Asia through which persons from different countries, from ministers on down, can measure achievement and compare experience.

With respect to family planning programs, therefore, the meeting offered a lively and vigorous sense of evolving opportunities for assistance, and donors commented positively on the prospects for larger funds and for the sharing of information on projects.

b. With respect to increased support for research leading to improved contraceptives, the evidence of need was equally clear, but the prospective response of funding sources was much less certain. Several participants stressed that present contraceptive methods do not fit very well the varied needs of developing countries, and some of the most widely used methods are not as safe as would be desirable. The findings and estimates of the Greep report (Reproduction and Human Welfare) present a strong case for increased funding for research. There are a variety of channels through which such funds can flow, and agreement at this meeting - which will be hard to translate into action - that in addition to more funds from donor agencies flowing through the World Health Organization, the International Committee for Contraception Research, and other multilateral and bilateral arrangements, there ought to be more funds forthcoming from the National Institutes of Health in the United States and the Medical Research Councils in other industrial countries. There is need, as this group sees the matter, for increased funding right across the spectrum from fundamental research on human biology through the development of improved contraceptives to research among users on acceptability and safety.

But comments on the likelihood of funding increases were skeptical. On the one hand, the less developed countries have few resources for the needed research, and their governments generally give lower priority to research than to action programs. On the other hand, industrial countries have larger research capacity but their priorities place population well down the scale below cancer, heart disease, and other problems seen as more immediate for their citizens. Nor did the group see an easy way to bring researchers, donors, and users together to review periodically the state of the field and the priority needs for funds. Mr. Burr expressed our common distaste for a new organization to perform such a function. But at the end we were left with the sense that there are important needs here for which we did not see a solution, and Mr. Hopper suggested that the International Development Research Centre and the Rockefeller and Ford Foundations - the agencies that financed the Greep report - should give further consideration to the problem of obtaining increased funding for research aimed at improved contraceptives.

2. Also on this meeting's list of urgent things to do are a series of items which go beyond family planning.

a. The meeting agreed on the clear need for a steady rise in demographic and social science research related to population dynamics - fertility, distribution, mortality - most of which will need to be conducted in developing countries because it must explore the widely varied circumstances of different local settings. Mr. Kisa noted the striking fact that fertility has declined in some developing countries but not in others, and we don't know why in

177

either case. In a brief colloquy several participants noted the fact - astonishing to a layman like me - that we also do not know with any precision what factors explain the substantial reductions in mortality in recent decades in most developing countries. Clearly it is urgent that these major historical changes in fertility and mortality be better explored and understood.

Several participants stressed the need for research on policy-oriented questions about the interrelationships between population and development - for example, the need for detailed studies seeking to understand the relationships in rural areas between economic and social variables on the one hand and demographic behavior on the other. Here we all await with much interest the outcome of Carmen Miró's International Review Group, with its expected clarification of the areas of our ignorance and the state of research capacity in developing countries. But there is much to be done now, without waiting, to enlarge the number of trained social scientists in developing countries who are interested in population work, and to help strengthen research centers, university faculties, and other institutions which can support them in their work - all of which are expensive and time-consuming tasks for which, it was agreed, increased donor funding is needed.

b. A second point of agreement is the need, pressed by several participants, for some bold and far-reaching efforts to re-think development plans in an attempt to maximize the effect of a variety of activities - including those related to health, education, nutrition, employment, the status of women, and so on - on population growth and distribution. In Mr. Wahren's colorful phrase, we need to know the effect on population changes not just of the 2 percent of development funds spent directly on population programs but also of the 98 percent of development funds spent for other purposes, many of which undoubtedly have significant effects on population growth and distribution. Any early efforts in this direction are bound to be imperfect but should also be revealing. They should clearly be related to specific country settings - or perhaps regional or local settings - and as Mr. Kisa urged not be simply exercises in abstract model-building.

Who might undertake exercises of this kind, with what type of assistance, is not clear to me. Perhaps national population commissions in developing countries, as I believe Mr. Demeny suggested, might do so, but it was agreed that the objective should be to produce regular status reports, not just one-time reviews. Another approach suggested was for donor agencies - especially those like the World Bank which have strong analytical staffs - to experiment with efforts of this kind. Both developing countries and donor agencies could do a good deal to interrelate the 98 percent and the 2 percent, Mr. Hopper suggested, by continually keeping before planners and decision-makers the question: What will be the demographic impacts of proposed development projects?

c. A third point of agreement is the need to support experiments and innovations which combine a variety of measures - rural development plus education plus cooperatives plus family planning, to use a hypothetical illustration. Quite a few experiments of this kind are now underway in various countries, and more are being proposed, mostly on a local basis and many - perhaps most - initiated by private organizations. Around this table it was argued that such experiments may show how to build stronger organizations at the village level, with greater community participation in decision-making, and greater overall results in raising human welfare, than could separate programs in several fields trying to reach down to the village level. Two important cautions were expressed. One, by Mr. Hopper, was a warning against repeating the error of trying to do everything at once which led to the failure of most of the large-scale community development programs of the 1950s. The other was the comment that considerable care, and the involvement of very skilled social scientists, are necessary if one is to derive with confidence replicable findings from such complex, many-faceted, community-based experiments.

3. Finally on the list of things to do - as effectively argued by Mr. Salas, Miss Henderson, and Ambassador Green - is to continue

to work to raise the awareness of leaders in both industrial and developing countries of the importance of population change, its interaction with other elements of economic and social change, and the urgency of action of the kind discussed at this meeting. Even though such awareness has been rising it was agreed that much more effort is needed; political leaders particularly are at risk of giving less attention to population issues than is warranted because demographic changes often appear to yield only to long-term measures whereas political leaders always feel themselves under short-term pressures. Various suggestions were made about how to raise the awareness of leaders, including promoting regional meetings and parliamentary study tours.

So much for my list of things to do.

I have one last comment. This is to record that I, for one, found this Bellagio meeting thoroughly worthwhile. As Ernst Michanek said to me in the hall yesterday noon, one of the tests of a meeting like this is whether you have your ideas about the subject shaken up a bit, and that has certainly happened at this meeting. I was among those who were somewhat doubtful, a year ago, that another in the series of Bellagio meetings would be profitable. I have been converted, and would like to propose in closing, for the consideration of the group, that another meeting in this series be scheduled two or three years from now.